ex Bibl. Audouin (de Lafaste)

Hagen, Bibl. Ent. p. III. No. 22 - gives the title incorrectly and commits other errors in referring to these memoirs.

This original edition is of extreme rarity - Dr. Horn informed me that he had never yet been able to obtain a sight of it.

"Vaster Cum Entomology" (1787 - 1834)

The above is in the writing of Edw. Janson

B. Quaritch
R.S.N.C.
15 = VI = 10

Vente de la bibliothèque de Audouin 1842. p. 49. No 681.
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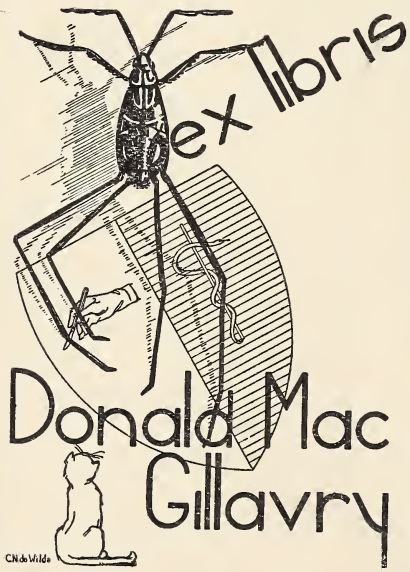
Rarissimo!



DESCRIPTIONS

OF NEW SPECIES

OF

NORTH AMERICAN INSECTS,

AND OBSERVATIONS

ON

SOME OF THE SPECIES ALREADY DESCRIBED.

BY

THOMAS SAY.

NEW HARMONY, INDIANA.

1829—1833.

Description of new North American INSECTS, *and observations on some already described.*

By THOMAS SAY,

AMBLYCHEILA, Say.

Labrum transverse, much wider than long; mandibles prominent, strongly toothed: labial palpi elongated; basal joint short, entirely concealed by the mentum; second joint short, spherical, resting on the edge of the emargination of the mentum; the third joint elongated, cylindric, with rigid hairs; fourth joint enlarging to the extremity where it is truncate somewhat sinuate: mentum, tooth robust, prominent, canaliculate before, acute: antennæ, second joint two-thirds the length of the third: wings none; elytra united: eyes very small, hemispherical, entire: clypeus at tip entire.

A. *cylindriformis*, Say. (Manticora) Journ. Acad. Nat. Sc.

This insect which I found near the Rocky Mountains, I described under the genus Manticora, but judging by the present mutilated state of the specimen it seems to agree better with the Megacephala. It differs from Manticora altogether in form, in the smaller size of the head, and in not having alobed thorax, &c., but it corresponds in the comparative magnitude of the eyes, the diameter of which is hardly more considerable than that of the basal joint of the antennæ. In the size of the eyes it differs greatly from Megacephala, also in the circumstance that the basal joint of its labial palpi is altogether concealed by the mentum: but it agrees with this genus in form, and is probably more closely related to it than to Manticora. Still however as it does not agree with any known group it may perhaps be proper to construct a genus for its reception.

CICINDELA, Linn.

C. *unicolor*, Dej. This species appears to have an extensive range. I received a specimen from Dr. Pickering of Massachusetts, and I found another in Florida. It varies in having a slight touch of white on the tip of the elytra.

C. *marginata*, Fabr. Syst. Eleut. 1, 241, No. 48. Dejean has described this species under the name of *variagata*, Sp. Gen. 1, 84—see also Vol. 2, 414.

C. *unipunctata*. Fabr. varies in having a very small obscure yellowish spot, half way between the ordinary spot and the tip, on the margin.

C. *Vulgaris*, Say, Trans. Amer. Philos. Soc. 1818. Since described by Dejean under the name of *obliquata*, Sp. Gen. 1, 72, but corrected Vol. 2, Supp. 414.

C. *hirticollis*. Say, Trans. Amer. Philos. Soc. 1818. Since described by dejean with the name of *repanda*, Sp. Gen. 1, 74, but corrected Vol. 2, 414.

C. *dorsalis*. Say, Trans. Amer. Philos. Soc. 1818. Since described by Dejean with the name of *signata*, Sp. Gen. 1, 124, but corrected Vol. 2, 414, Supp. and on page 426 of the same supplement he describes another species under the name of *dorsalis*, which however will of course be changed, as mine has the priority.

C. *purpurea*, Oliv. Ins. 33, pl. 3, f, 34. Say, Trans. Amer. Philos. Soc. 1818, p. 419. C. *marginalis*, Fabr.

Syst. Eleut. 1, 240 and Dejean Sp. Gen. 1, 55. Olivier has certainly the priority, and consequently the exclusive right as being the first describer of this species.

C. *sexguttata*, Fabr. Dejean has ascertained autoptically that C. *violacea* Fabr. is the immaculate variety of this species.

C. 12—*guttata*, Dej. I obtained a specimen in Missouri state.

Of this genus I have in my cabinet twenty-two species, natives of the United States, that have been described.

ARETHAREA, Say.

Artificial Character.

Elytra truncated; terminal joint of the maxilary palpi acicular; anterior tibiæ simple.

Natural Character.

Head large, wider than the thorax, contracted behind at the junctio with the thorax; *antennæ* originating beneath a carina, with the first joint much shorter than the head; *labrum* short, bilobated; the lobes divaricated; margin hairy: *mandibles* very prominent, arquated, acute; within prominently and acutely denticulated: *maxillae* rectilinear with rigid hairs within; *palpi* with the penultimate joint dilated; ultimate joint acicular & minute: *labium* at tip with two equal membranaceous lobes & a lateral robust seta; *palpi* very small and feeble, terminal joint somewhat shorter & more slender than the preceding one: *mentum* transverse, simple; destitute of auricles: *thorax* cylindrical; truncate before and behind: *elytra* broadly truncate at tip: *tibiae*, anterior pair simple; tarsi with subequal simple joints; the basal one slightly longest, nails unarmed: posterior pair of feet with the nails pectinated.

Observations.

The prominent, arquated and denticulated mandibles of this curious insect, resemble with some accuracy, those of Cicindela; but the general appearance and extraordinary assemblage of characters widely separate it. It has the truncated elytra of *Lebia* and its congeners; the simple anterior tibae of Cicindela and a singular character that seems to connect the two families, that of having the anterior pair of nails simple and the posterior pair pectinated. We may also remark, however, that the acicular terminal joint of the maxillary palpi is a trait in common with Benbidium, Bon.

A. *helluonis*, Head black; thorax rufous; elytra blue.

Inhab. Pennsylv.

Head punctured, somewhat hairy; *eyes* small, almost equidistant between the tip of the mandibles and the thorax; *antennae* first and second joints pale rufous: *labrum* yellowish rufous; *mandibles* piceous: *palpi* pale yellowish rufous: *thorax* punctured, excepting along the *dorsal* middle; *elytra* destitute of striae or punctures, blue with a purplish reflection: *feet* and *postpectus* pale yellowish; knees and tarsi brownish.

Length three-tenths of an inch.

The intermediate feet and the antennæ excepting the first and second joints are deficient in the specimen.—I am not sure whether I obtained it on our journey to the Rocky Mountains, to St. Peter's river, or in Pennsylvania, but I think the latter.

Descriptions of new North American INSECTS, *and observations on some already described.*

By THOMAS SAY.

(Continued from page 67.)

CASNONIA, *Latr.*

C. *rufipes*, Dej. The insect of this genus, represented by Drury (Ins. 1, pl. 42, f. 4 & 6,) is probaly a variety of this species. Dejean has not noticed this figure at all. The Galerita americana is represented in the same plate.

SPHERACRA, *Say.*

Elytra entire; tibiæ emarginate; terminal joint of the tarsi profoundly bilobated; nails simple; head as long behind the eyes as before them; thorax subcylindric; antennæ much shorter than the body; basal joint much shorter than the head, joints, excepting the second not very unequal in length, subcylindric; labrum emarginate; palpi with the terminal joint somewhat fusciform, subacute: mentum with a prominent, acute central tooth.

S. *dorsalis*, Fabr. "Black; elytra striate, testaceous; suture broadly black.

Inhab. Carolina. Mus. Mr. Bosc.

Smaller than O. *angustata*. Antennæ testaceous: head black, polished, broader than the thorax: thorax cylindrical, obscurely ferruginous;—elytra striate, testaceous, suture broadly black, hardly attaining the tip: body black, feet testaceous." Fabr.

Odacantha dorsalis. Fabr. Syst. Eleuth. 1, 229.

In my specimen the head only is black, or rather of so deep a rufous as to appear black, excepting the tip and base.

This well known species was referred by its discoverer Fabricius, to his Genus Odacantha; in which arrangement he was followed by Dejean, who, however, was fully aware of its generic difference from the O. *melanura*, Fabr. Dejean in his observations on the genus, says, "that in consequence of the joints of the tarsi being less filiform, than those of the type of the genus, almost triangular, the penultimate one deeply bilobate and the extremities of the elytra rounded, it would be perhaps proper to make a new genus of this insect." In this remark I perfectly coincide, as I cannot see the propriety of joining, in the same genus, two insects whose characters, in the artificial system place them in different families, though it cannot be denied that they have many, more intimate, natural affinities.

I had written the above with the expectation of introducing a new species, in an insect which in form and colour, resembles the *dorsalis*, exceedingly to the eye, excepting in size, but on close examination it proves to be widely distinct.

CYMINDIS, *Latr. Dej.*

4. C. *platicollis*, Say. (Lebia) Trans. Amer. Philos. Soc. vol. 2, new series.

This species has been since described by Dejean under the name of C. complanata. In my specimens the palpi are hardly dilated. It varies in having the thorax darker and of the colour of the head. I obtained an individual in Indiana.

2. C. *laticollis*, Blackish; thorax transverse; feet pale rufous; elytra with slender striæ and minute punctures.

Inhab. near the Rocky Mountains.

Body black-brown, punctured, with short hairs: *head* - - - : thorax decidedly transverse, with numerous, somewhat large punctures; truncate before, and a little sinuate behind;—margin each side depressed and a little elevated, dull rufous; at the posterior an obvious tooth: *elytra* with very slender, capillary striæ in which are minute punctures, which are larger and more obvious towards the base and lateral margin; interstitial lines with a very slight convexity, and with numerous, small punctures, rather larger than those of the striæ; lateral margin obscure rufous; tip truncate, without any appearance of sinuation: *beneath* obscure rufous, punctured: *feet* rufous; *thighs* and *trochanters* paler.

Length about two-fifths of an inch.

I obtained it when on the expedition to the Rocky Mountains with Major Long. The thorax is shaped somewhat like that of *americana*, Dej., but is wider as in *platicollis*, Say. The elytra have not the slightest appearance of being sinuated at tip.

3. C. *pilosus*, Say, Trans. Amer. Philos. Soc. Since described by Dejean, under the name of *pubescens*, Sp, Gen. 1, p. 215, but corrected in vol. 2, Suppl. p. 446.

CALLEIDA, *Dej.*

1. C. *viridipennis*, Say, (Cymindis) Trans. Amer. Philos. Soc.

This species has been since described by Dejean, under the name of *marginata*, v. Spec. Gen. 1, p. 222, but corrected vol. 2. Supp. p. 450.

He has given the name of *viridipennis*, to another species; but as it is a subsequent name, he will of course change it.

2. C. *smaragdina*, Dej. A specimen of this insect was sent to me by Dr. Pickering, from Salem, Massachusetts, so that it is probably a general inhabitant of the Atlantic U. S., but as I have found it myself but once, (in the state of Ohio,) I should suppose it is rare.

3 C. *purpurea*, Say, (Cymindis) Trans. Amer. Philos. Soc.

4. C. *decorus*, Fabr. Say, (Cymindis) Trans. Amer. Philos, Soc. Dej. Sp. Gen. 1, 224.

LEBIA, *Latr. Dej.*

1. L. *ornata*, Say, Trans. Amer. Philos, Soc. Since described by Dejean under the name of *analis*, Spec. Gen. 1, 265, and corrected, 2, Supp. 452.

2. L. *viridis*, Say, Trans. Amer. Philos. Soc. Dejean has described a species under the same name. It is closely allied to, if not the same as this, but if not the same species, the name must of course be changed. Spec. Gen. 1, 271.

3. L. *fascata*, Dej. varies in having the head nearly black, the thorax yellowish ferruginous, and the elytra paler brown, with the yellowish spots, particularly the terminal, almost obsolete.

(The following genus should have been inserted between the genera Amblycheila and Cicindela.)

MEGACEPHALA, Latr.

M. *carolina*, Fabr. This species is certainly found in the southern part of the Union: I have an individual that was taken near New Orleans, it varies a little from West Indian specimens in being less deeply sculptured,

NATURAL HISTORY.

Description of new North American INSECTS, *and observations on some already described.*

By Thomas Say.

BRACHINUS, Weber.

B. *stygicornis*, Ferruginous ; antennæ black ; elytra blackish-blue.

Inhab. Missouri.

Body ferruginous, with short hairs : *head* with irregular punctures each side between the antennæ, becoming irregular, but slight, lineations near the eyes : *antennæ* brownish-blue, first and second joints ferruginous : *thorax* with minute, irregular, transverse lines, dorsal lines well impressed : *elytra* slightly grooved, more obviously so towards the base ; edges beneath, purplish ; *postpectus*, except in the middle, and *venter* blackish, with short, whitish hairs.

Length seven-twentieths of an inch.

Var. a. Sutural edge of the elytra ferruginous.

I obtained this species in the winter of 1819, when with Major Long's party at Engineer Cantonment near Council Bluff. It occurred in considerable numbers, occupying some crevices of rock, eight or ten feet under the surface, in a temporary euarry, where they were hybernating. It differsfrom *cyanipennis*, Say, found at the same locality, by the different colour of the antennæ, &c.

Can this be the *janus*, or is the *quadripennis*, Dej., synonymous with that species, described in Turton's Linn. ?

CLIVINA, Latr, Dej.

1. C *bipustulata*, Fabr. The true species of this author, has almost always, if not in every instance, but two spots on the elytra, and these are terminal. The second interstitial line has seven or eight subequidistant punctures, and the fourth interstitial line has five or six punctures, subequal, excepting the terminal one which is more distant.

2. C. *quadrimaculatus*, Palisot de Beauvois.—This species is quite distinct, though very closely allied to the *bipustulata*. It is similar in size and almost so in form ; but the thorax is proportionally longer In colour it is generally like the preceding, but in addition to the two terminal punctures of the elytra, their base is more or less, but generally obsoletely, tinged with obscure rufous. The interstitial lines are altogether destitute of punctures. I have a variety in my collection, of which the elytra are entirely of a rufous colour and even paler than the terminal spots usually appear ; these spots are of course not visible.

3. C. *viridis*, Say. Trans. Amer. Philos. Soc., has been since described by Dejean under the name of *rostrata*, Sp. Gen. 1, 419, but corrected vol. 2, Supp. 478.

Of this genus I have eight described species of this country.

CARABUS, Linn.

1. C. *vinctus*, Weber. I think it highly probable that Dejean is right in considering, as he does (doubtfully however) my C. interruptus, to be the same as this. Weber's expression, "linei

elevation, [illegible] renders this conclusion highly probable

probable.

2. *ligatus*, Germar. Sp. novæ, p. 6. Since described by Dejean under the name of *carinatus*, Sp. Gen. 2, 80. He quotes *ligatus* doubtfully as synonymous. His description, however, agrees so perfectly that I feel no hesitation in considering them the same.

3. C. *serratus*, Say. Trans. Amer. Philos. Soc. Since described by Dejean under the name of lineato-punctatus, Sp. Gen. 2, 77; the former has, of course, the priority.

4. C. *externus*, Say. Jour. Acad. Nat. Sc.—The largest American species I have seen. It belongs to Dejean's twelfth division of *this* numerous genus. What is the C. *tædatus*, L.?

CALOSOMA, Weber.

1. C. *luxatum*, Say. Jour. Acad. Nat. Sc. 3, 149. Dej. Sp. Gen. 2, 196.

2. C. *læve*, Dej. Sp. Gen. 2, 210. I obtained an individual of this insect in Mexico. It corresponds accurately with the description; but in addition I may add that it varies in having a large obscure rufous spot on the vertex.

3. C. *calidum*, Fabr. My description in the Trans. Amer. Philos. Soc. was taken from the true Fabrician species as is evinced by the expression "dilated, impressed, golden dots" as applied to the elytral excavations. But I did not sufficiently examine the very closely allied species which Dejean has separated from it, as I supposed it to be only a variety.

ELAPHRUS.

1. E. *fuliginosus*. This new species was found in Pennsylvania by Mr. Le Sueur, to whom I am indebted for the specimen; and although the head and thorax are destroyed, yet sufficient character remains to prove it the analogue of the E. *uliginosus*, Fabr., of Europe. In comparison with that species, however, many dissimilarities are perceptible. The discoidal indentations are larger and more obviously emarginated by the entering angles of the interstitial spaces. The interstitial spaces are somewhat less regular, and have rather large punctures, particularly towards the base; towards the tips of the elytra the punctures are not larger than those of the *uliginosus*, but are fewer in nnmber. The body is slightly larger than in that species.

It appears so be rare.

2. E. *ruscarius*. This species I described in the Trans. Amer. Philos. Soc., with a mark of doubt, as the E. *riparius*, Fabr., but having recently compared it more accurately with numerous European specimens, I think it may, with propriety constitute a distinct, but certainly, very closely allied species. In comparison with the *riparius*, it is rather more robust, of a darker colour, more deeply sculptured, as well on the thorax as on the elytra, and the discoidal impressions are somewhat larger and more obvious.

In these characters my specimens all agree, and I possess more or less mutilated specimens from Pennsylvania, Mississippi, Arkansaw, Missouri and the Rocky Mountains. I therefore have ventured to separate it as a distinct species.

(To be continued.)

NOTHIOPHILUS, Dumer.

1. N. *semistriatus*, Say. Closely allied to N. *aquaticus*, F., and *biguttatus*, F., partaking of the characters of both. Dejean states that it "ne diffère peut-etre pas de l'une des especes d'Europe," but he does not inform us which of the species; indeed they are all so closely allied, that considerable examination is required to detect permanent differences. The elytral puncture is small and like that of *aquaticus* placed nearer the base than that of the *biguttatus*, but the striæ, like those of the latter, are not obsolete towards the tip; the four basal joints of the antennæ are rufous, &c.

2. N. *porrectus*, Say. M. *semistriatus*, Var. b. Say. Trans. Amer. Philos. Soc. On close examination I am convinced that this deserves to rank as a separate species. In comparison with either of the species above mentioned the thorax is much more contracted behind, and the labrum is more advanced. The feet are entirely rufous, even including the thighs. The head is larger than that of the *semistriatus*, and the striæ are not so deeply impressed, but the impressed point of the elytra is similarly situated, though perhaps a iittle further back. The length is much the same. The colour is tinged with violaceous.

CHLÆNIUS, Bonelli.

1. C. *pusillus*, Say. Trans. Amer. Philos. Soc. Since described by Dejean under the name of *elegantulus*.

2. C *tomentosus*, Say. (Epomis.) Trans. Am. Philos. Soc. This species has been referred to this genus by Dejean; the palpi are not sufficiently securiform, for Epomis.

3. C. *circumcinctus*, Green tinged with violaceous; edges rufous.

Inhab. Louisiana.

Body green, more or less tinged with violaceous and brassy, punctured: *head* minutely and confluently punctured; in the middle tinged with bronze; lateral edges dark purplish: *antennæ* reddish brown, three basal joints pale yellow with rufous incisures; *labrum* and *mandibles* honey yellow, the latter black at tip: *palpi* yellow; terminal joints honey yellow: *thorax* deeply punctured, sparse near the anterior angles, and almost wanting each side of the middle; dorsal line acute almost obsolete; basal lines widely indented; lateral edge regularly arquated, dull rufous; basal edge rectilinear in the middle and a little oblique each side, making the angles rather more than rectangular; green a little tinged with brassy: *scutel* dark purplish: *elytra* with profound, obsoletely punctured striæ; interstitial spaces flattened, punctured, sericeous; rather dull green with a slight violaceous reflection;—exterior and apicial edge dull rufous: *beneath* black: *feet* yellow, joints a little rufous: *venter* on the margin yellowish.

Length over two-fifths of an inch.

For this pretty species I am indebted to Mr. J. Barabino of New Orleans.

4. C. *vigilans*, Head and thorax brassy; antennæ at base and feet ferruginous; elytra violaceous.

Inhab. Mexico.

Pubescent: *head* impunctured, brassy-green, polished; two obsolete indentations between the antennæ: *labrum* transversely narrow, truncated, and with the *palpi* dull rufo-ferruginous:—*antennæ* fuscous, pubescent, three basal joints subglabrous, rufo-ferruginous: *thorax* brassy-green, with rather dense, very short hair, polished; dorsal and basal impressed lines distinct;—posterior angles not excurved, but obtusely angulated, almost rounded: *elytra* bluish-violaceous, with punctured striæ; interstitial spaces pubescent, depressed, and minutely granulated: *beneath* blackish: *feet* rufo-ferruginous.

Length half an inch.

Much like C. *nemoralis*, Say, but the antennæ of that species are entirely rufo-ferruginous, its posterior thoracic angles are slightly excurved, &c.

5. *soccatus*, Blackish; feet ferruginous with blackish tarsi and joints.

Inhab. Mexico.

Body blackish, with a slight violaceous tinge; minutely pubescent, punctured: *head* blued-black, glabrous, two slight indentations between the antennæ, and an obsolete transverse one between the eyes: *antennæ* pubescent, blackish, three basal joints dark piceous: *palpi* piceous: *thorax* short; lateral margin regularly arquated; posterior angles rounded; impressed lines dilated: *elytra* with punctured striæ; interstitial spaces minutely granulated, depressed: *beneath* blackish: *feet* rufo-ferruginous, joints and tarsi blackish-piceous.

Length nearly half an inch.

Resembles *vigilans* Nob., but the thorax is shorter and the lateral curvature is more regular, that of the preceding species being almost rectilinear from near the middle to the posterior angles, the colours also are different in their arrangement.

Of this genus I have sixteen North American described species.

OODES, Bonel.

O? *parallelus*, black; thoracic angles rufous; feet piceous.

Inhab. Louisiana.

Body black, very slightly tinged with piceous: *head* with but a slightly impressed point between the antennæ: *antennæ* reddish brown, three basal joints honey yellow: *palpi* honey yellow: *mandibles* piceous: *thorax* narrowed before, smooth, dorsal line distinct, not extended on the margins; basal lines distinct, oblique; region of the posterior angles a little, but widely, depressed, rufous or sanguineous, and by transmitted light it appears reticulated; impunctured; posterior angles rounded, but not obtusely so; greatest width a

little behind the middle: *elytra* with the striæ continued parallel to the tip, well impressed, minutely punctured; interstitial spaces depressed, third with a single slight puncture on the posterior fifth from the base: *beneath* black: posterior angles of the *pectus*, *epipleura* and *feet* piceous; *anterior tarsi* with four not widely dilated subquadrate joints, the fourth joint being as large as the third and all beneath with dense fastigiate hairs; *intermediate tarsi* also somewhat dilated.

Length less than two fifths of an inch.

The elytra are hardly perceptibly sinuous near the tip.

The specimen for which I am indebted to Mr. J. Barabino of New Orleans is a doubtful congener of the O. *helopoides*, Fabr. than which the body is somewhat more elongated, the thorax more gradually narrowed before. It has at first sight more the appearance of the Harpalus terminatus or Calathus gregarious. Say. The intermediate tarsi are somewhat dilated, the anterior tarsi are not widely dilated and the terminal joint is as large as the preceding one. I place it in this genus provisionally, more specimens may shew this arrangement to be incorrect. The parallelism of the striæ of the elytra to their termination is a remarkable character, even more obvious than in the *helopoides*.

DICÆLUS, Bonelli.

1. D. *purpuratus*, Bonelli. Since described by Dejean under the name of chalybæus, Sp. Gen. 2.

2. D. *elongatus*, Bonelli, Say. Trans. Amer. Philos. Soc. Dejean is of the opinion that this is not the elongatus of Bonelli, and has described it with the name of *furvus*, but he has not stated the reasons for this opinion.

POGONUS, Zeigl.

P. *rectus*, Say. (Feronia.) Trans. Amer. Philos. Soc. I may add to the description that the striæ are well impressed and punctured rather densely on the sides; third interstitial line with about three punctures, excepting the middle one, hardly distinct from the punctures of the striæ.

PATROBUS, Meg.

P. *longicornis*, Say. (Feronia.) Trans. Am. Philos. Soc. Recently described by Dejean under the name of *americanus*, Sp. Gen. 3, p. 34. Why he has added a synonym in this case, I know not.

ANCHOMENUS, Bonel.

1. A. *decentis*, Say. (Feronia.) Trans. Am. Philos. Soc. Has been recently described by Dejean under the name of *gagates*.

2. A. *cincticollis*, Say. (Feronia.) Trans. Amer. Philos. Soc. Since described by Germar under the name of *blandus*, Sp. Novæ. p. 12, and recently by Dejean by the name of *corvinus*, Sp. Gen. 3, p. 109.

3. A. *extensicollis*, Say, (Feronia) Trans. Am. Philos. Soc., is also referred by Dejean to this genus.

4. A. *decorus*, Say, (Feronia) Trans. Amer. Philos. Soc. is also referred to this genus by Dejean.

5. A. *collaris*, Black with a hardly obvious tinge of purple; tibiæ and tarsi piceous; thorax subquadrate; elytra with three punctures on the third interstitial line.

Inhabits Indiana.

Body black, polished, glabrous, with a few, rather long, marginal hairs: *head* impunctured; base of the first joint of the antennæ, of the mandibles black-piceous; antennæ at tip brownish, third joint of the same length as the fourth; impressions between the eyes rather deep: *thorax* rather short, wider than long, subquadrate, impunctured; lateral edge regularly curved; margin slightly elevated, narrow, broader towards the posterior angles; dorsal and anterior lines distinct; posterior lines dilated, suborbicular, slightly rugous; posterior angles very obtuse; anterior and posterior margins subequally broad: *elytra* with acutely impressed striæ, regularly punctured; punctures small, obsolete towards the tip; third interstitial line with three punctures, two at the third striæ and the terminal one at the second striæ; interstitial lines much depressed: *tibiæ*, *tarsi*, knees and extreme base of the thighs piceous.

Length seven-twentieths of an inch.

This species is rather more robust in proportion to its length than the other American species. The thorax is much broader and shorter. The species is perhaps more like *scutellaris*, Say, than any other; that insect is remarkably depressed about the region of the scutel.

AGONUM, Bonelli.

1. A. *suturale*, Green, polished; suture cupreous.

Inhab. Mexico.

Above metalic green, polished, impunctured: *head* with a slight coppery reflection; *labrum*, *antennæ* and *palpi* blackish: *thorax* varied with cupreous, dorsal line and basal dots obviously indented; *elytra* with very slender striæ; interstitial spaces wide and plain, first one cupreous, third with three punctures, equidistant, basal one on the third stria, middle one on the second stria: *beneath* piceous-black; *coxæ* piceous.

Length three-tenths of an inch.

This is a brilliant species, equaling in this respect the 8-*punctatus*, Fabr., and *errans*, Nob. and but little inferior to *cupripennis*, Nob., all of which, togother with *nutans*, Nob., belonging to this genus, although I referred them to the including genus *Feronia*, Latr. The *cupripenne*, Nob., is equal in splendor, though not in magnitude, to the 6-punctatum, Fabr. In comparison with the *parum punctatum*, F., the form is more robust, thorax more brilliant, wider and [illegible]

wide at base as anteriorly; the interstitial spaces also are much more flattened.

2. A. *orbicollis*, Black; thorax rounded; third interstitial line with three punctures.

Inhab. Mexico.

Body black, polished, impunctured: *antennæ* ——, basal joint, and *palpi* piceous: *thorax* orbicular, truncate before and slightly so behind; lateral edge regularly arquated, not depressed, but with a simple and equally elevated edge;—dorsal line obsolete, anterior and posterior transverse lines obsolete; basal impressed lines or dots distinct; *elytra* with well impressed striæ, which are crenate, not punctured; interstitial lines convex, the third from the suture with three equidistant punctures: *feet* piceous.

Length nearly seven-twentieths of an inch.

Size of A. *viduum*, Fabr., with similar punctures on the third interstitial line, excepting that they are equidistant, and these lines are more convex, the thorax is much more orbicular, the feet differently coloured, and there is no brassy reflection. This cannot be the *melanarium*, Dej., for the striæ are as obvious as in the *viduum*, and although the thorax agrees with that insect in being "plus etroit" than that of the viduum, yet it would not be described as "subrotundato," as that author applies the same term to designate the form of the thorax of viduum. It is much like A. *punctiformis*, Say, but it is a little more elongated, the thoracic lines are much less distinct, &c.

3. A. *nutans*, Say, (Feronia) Trans. Amer. Philos. Soc. Since described by Dejean with the name of striatopunctatum.

4. A. *errans*, Say, (Feronia) Journ. Acad. Nat. Sc. The interstitial space has three punctures, of which the first and second are somewhat nearer than the second and third.

5. A. *punctiformis*, Say, (Feronia) Trans. Am. Philos. Soc. I have an individual that has four punctures on the third interstitial space as Dejean describes his albicrus to have.

6. A. *obsoleta*, Say, (Feronia) Trans. Amer. Philos. Soc. Since described by Dejean by the name of luctuosum, Sp. Gen. 3, 172.

7. A. *limbatum*, Say, (Feronia) Trans. Amer. Philos. Soc. Since described by Dejean by the name of *palliatum*, Sp. Gen. 3, 174.

OLISTHOPUS, Dejean.

1. O. *parmatus*, Say, (Feronia) Trans. Amer. Philos. Soc. Dej. Sp. Gen. 3, p. 181.

2. O. *cinctus*, Blackish; edge of the thorax, elytra and feet dull rufous.

Inhab. Pennsylvania.

Body blackish: *head* impunctured: *antennæ* dusky, pale rufous at base: *palpi* piceous: *thorax* with the dorsal and anterior lines almost obsolete; lateral narrow margin obviously rufous; lateral basal impressions very distinct, suborbic-

ular and sparsly punctured: *elytra* dull reddish brown, with a slight perlaceous reflection; *striæ* well indented, impunctured; interstitial spaces depressed, third space with an impressed puncture beyond the middle: *feet* yellowish piceous, posterior pair darker.

Length less than three-tenths of an inch.

Much like the *parmatus*, Say, it is more slender.

FERONIA, Latr. Dej.
(Pœcilus, Bon.)

1. *convexicollis*, Say. Resembles F. *chalcites*, Say, but is shorter, the thorax more convex, and the punctures of the third interstitial striæ of the elytra are three, of which the terminal is near the tip.

(Steropus, Meg.)

2. F. *obsoleta*, Blackish-ferruginous; elytra, striæ obsolete each side and at tip.

Inhab. Indiana.

Body very dark rufous, polished: *labrum*, *palpi*, *mandibles* at base, *antennæ*, *feet* and *abdomen* honey-yellow: *head* impunctured; a slight raised line over the antennæ, inside of which the front is slightly corrugated transversely each side: *thorax* with the surface obsoletely corrugated, visible in a particular direction; dorsal line acute, slightly impressed; basal lines indented, single, viewed from above orbicular, definitely and rather deeply impressed; base a little emarginate, not wider than the abdominal petiole; *elytra* with punctured, not deeply impressed striæ, obsolete at tip and on each side; marginal ocellate punctures about seventeen, in a continuous series rather sparse in the middle; near the tip very slightly sinuated; third interstitial space with a puncture near the middle of the second stria.

Length two-fifths of an inch.

Closely allied to S. *illigeri*, Panz., but the thorax of that species is not so narrow at base, and its elytral striæ are not obsolete at tip, and not even decidedly so on the sides. It is exceedingly like S. *ventralis*, N., but it is more robust and the sides of the elytra are more arquated.

The characters of this species agree very well with the description of *tenebricosa*, Dej., excepting that the elytra are not "assez fortement sinuées postérieurement."

3. F. *obscura*, Black; tibiæ and tarsi dark rufous; elytral striæ obsolete each side.

Inhab. Indiana.

Body black; *labrum* and base of *mandibles* tinged with rufous: *palpi* dull honey-yellow:—*antennæ* blackish-ferruginous: *front* with two indented lines: *head* impunctured: *thorax* not so narrow at base as the petiole; dorsal line acute, not deeply impressed; basal lines well indented, definite, impunctured, not orbicular viewed in any direction, very slightly arquated; *elytra* stri-

ate ; the striæ not distinctly punctured, obsolete on the lateral submargin, and not so obvious at tip as on the disk ; marginal ocellated punctures about seventeen ; near the tip rather slightly sinuate ; third interstitial tripunctured, the two anterior punctures at the third stria.

Length less than nine-twentieths of an inch.

Resembles the preceding but the thorax at base is wider and the body is longer. In the proportion of the base of the thorax it corresponds with F. *illigeri*, Panz., but aside from colour it may be distinguished by the obsolete lateral striæ, the much less dilated thoracic basal lines, &c.

(Platysma, Sturm, Dej.)

4. F. *oblongo-notata*, Dark reddish-ferruginous ; elytra with 5 or 6 large subsutural punctures.

Inhab. N. W. Territory.

Body with a hardly perceptible metallic gloss : *head* darker : *thorax* with the dorsal line very distinct ; lateral basal lines well indented and with obsolete confluent punctures ; posterior angles angulated : *elytra* striated ; five or six large indented punctures placed somewhat alternately on the second and third striæ ; marginal ocellate punctures with their regions indented.

Length nine-twentieths of an inch.

This is the analogue of the F. *oblongo-punctata*, F. corresponding in the punctures of the elytra ; but differing in colour, and having the thorax somewhat more robust.

5. F. *deparca*, Reddish-brown ; thorax punctured on the anterior and posterior margins.

Inhab. Mexico.

Body reddish-brown, rather pale : *head* much darker, tinged with blackish, impunctured : *antennæ* short, not reaching the base of the thorax : *thorax* rather abrubtly contracted behind ; anterior and posterior margins deeply punctured, the punctures of the former not extending to the lateral margin ; lateral margin with a puncture furnishing a hair on the middle and another on the posterior angles, which are rectangular ; dorsal line distinct, but not deeply impressed ; basal impressions dilated and with all the base punctured : *elytra* with slender striæ, not deeply impressed, but with very distinct punctures ; seventh stria obsolete towards the tip : *epipleura* and all *beneath* paler.

Length nearly half an inch.

The light colour, with the punctured anterior and posterior thoracic margins, will distinguish this species.

It was taken by Wm. Bennett and presented to me by Mr. Maclure.

(Abax. Bonelli.)

6. A. *coracinus*, Say. Trans. Amer. Philos Soc. I think this is the insect that Dejean has recently placed in Ziegler's Genus Myas and described under the name of *cyanescens*, the insect agrees perfectly with his description, but as the

palpi of my only remaining specimen are deficient, I cannot be certain of its generic identity.

7. F (A.) *permunda*, Black, with a pearlaceous reflection; third interstitial line three-punctured.

Inhab. Indiana.

Body black; *antennæ* piceous, dull honey-yellow towards the tip, distinctly compressed;—joints, in profile, a little narrowed to the base: *palpi* piceous, not at all securiform, terminal joint less dilated at tip than that of the preceding joint: *thorax* with a slight pearlaceous reflection, rather narrower at tip than at base; lateral margin depressed, punctured, gradually reflected to the edge, which is but little arquated; posterior angles rectangular; disk impunctured; dorsal line well indented; basal lines two on each side, punctured within, deeply impressed, the exterior one very short: *elytra* brownish-black, somewhat iridescently pearlaceous; striæ deeply indented, impunctured: scutellar stria short, but definite: interstitial spaces convex; third three-punctured, first puncture near the base on the third stria, second on the middle on the second stria, third towards the tip also on the second stria: *beneath* piceous; sides very distinctly and numerously punctured.

Length half an inch.

I obtained this fine species a few days since under an old log. It does not at all agree with either of the descriptions of Dejean. The labrum is not emarginate. The terminal joint of the palpi is less dilated towards the tip than that of the A. *parallelus*, Duftschm. or A. *metallicus*, Fabr.

(Molops, Bonelli.)

8. F. *constricta*, Say. Journ. Acad. Nat. Sciences.

STOMIS, Clairv. Dej.

S. *granulatus*, Black, antennæ dull rufous, blackish piceous towards the base.

Inhab. Mexico.

Body black, apterous, polished: *head* impunctured; impressed lines between the antennæ very obvious: *antennæ* blackish-piceous to the fifth joint, which with the others are dull rufous; first joint hardly as long as the third: *labrum* a little prominent, piceous, widely but not deeply emarginated before: *palpi* dull rufous, not very widely truncated at tip; labiales not securiform: *mandibles* prominent very acute: *thorax* as long as broad, not remarkably convex; impunctured;—dorsal line distinct, not extending to the base, which is a little depressed; lateral margin depressed and reflected, narrow, wider near the posterior angles, which are somewhat acute;—lateral edge excurved near the posterior angle; basal lines distinctly indented and dilated; base considerably wider than the peduncle: *elytra* somewhat depressed, ovate-oval; surface composed of very minute granules; striæ slender, deeply impressed, impunctured; third intersti-

tial space with three nearly equidistant punctures, the terminal one much the largest, with minute elevated centres; tip very obtusely sinuous: *tarsi* dull rufous.

Length less than two-fifths of an inch.

Taken by Wm. Bennett, during his stay in Mexico with Mr. Maclure.

It will be obvious from this description that our species does not well correspond with the S. *pumicatus*, Panz., but agreeably to the tables given by Dejean it cannot be placed elsewhere. It is larger and more dilated than pumicatus, the basal joint of the antennæ is shorter, the palpi are not so obtusely truncated, and its habit and appearance quite different.

PELOR, Bonelli.

P. *avidus*, Say, (Zabrus) Jour. Acad. Nat. Sc.

AMARA, Bonelli.

In my paper on the Carabici and Hydrocanthari, published in the Trans. Amer. Philos. Soc. Vol. 2, new series, as above quoted, I described five species of the United States, under the genus Feronia agreeably to the arrangement of Latreille, indicating, however at the same time that they belonged to Bonelli's Amara.

But Dejean and many other distinguished entomologists give the group a separate station.

1. A. *musculis*, Say, (Feronia) Trans. Amer. Philos. Soc.

Dej. Sp. Gen. 3, 477.

2. A. *basillaris*, Say, (Feronia) Trans. Amer. Philos. Soc.

3. A. *impuncticollis*, Say, (Feronia) Trans. Am. Philos. Soc. Dejean thinks it the same as A. *trivialis*, Duftschm. but I have not yet compared it.

4. A. *angustata*, Say, (Feronia) Trans. Am. Philos. Soc.

5. A. *obesa*, Say. (Feronia) Trans. Amer. Philos. Soc.

6. A. *impunctata*, Say, (Feronia) Trans. Am. Philos. Soc. Dejean thinks it the same as the familiaris, Duftschm. but I have not satisfactorily compared them.

The following species appear to be new.

6. A. *dolosa*, Black; oblique line near the thoracic angle obviously impressed; elytra with impunctured striæ.

Inhab. Mexico.

Body black, impunctured: *head* with the impressed lines between the antennæ obsolete: *antennæ* fuscous, joints rather short, three basal joints honey-yellow: *palpi* black-piceous: *thorax* rather short, lines not deeply impressed; oblique line near the posterior angles very distinct; hair of the lateral margin situated at one third of the distance between the anterior and posterior angles, another hair at the basal angle: *elytra* with impunctured, capillary striæ; interstitial lines depressed, hardly convex: *feet* piceous-black;—*tibiæ* and *tarsi* a little paler.

Length nearly three-tenths of an inch.

Resembles A. *impuncticollis*, Nob. and A. *communis* and *vulgaris*, Fabr. but differs from all in colour, greater brevity of the thorax, more robust form, &c. Viewed in a particular light, a tint of blue may be, with some difficulty, detected.

7. A. *sera*, Greenish-black; three basal joints of the antennæ yellowish.

Inhab. Mexico.

Antennæ fuscous; first, second, third and base of the fourth joints yellowish: *thorax* impunctured, basal angles rectangular, with the oblique line not deeply impressed; basal lines rather deep, abbreviated, definite, impunctured; dorsal line distinct: *elytra* with the striæ impunctured, acutely impressed; basal abbreviated striæ rather long; interstitial lines with a very slight convexity, nearly flat; near the lateral tip slightly and rather acutely sinuated: *tibiæ* and *tarsi* piceous.

Length three-tenths of an inch.

The thorax is longer than that of the preceding species and the interstitial lines are a little convex, which will readily distinguish it from A. *impuncticollis*, N. The colours of the antennæ as strongly contrast, as those of A. *vulgaris*, F.

8. A. *furtiva*, Pale; thorax punctured at base; elytra with punctured striæ.

Inhab. Indiana.

Body honey-yellow, more or less tinted with dusky: *antennæ*, *palpi* and all *beneath* paler:—*head* with the frontal impressed lines dilated, distinct: *thorax* a little contracted at base, the posterior angles slightly excurved and acute; dorsal line well impressed, particularly behind the middle; basal lines deeply impressed and definite, punctured; impressed lines of the posterior angles, distinct and rather deep, punctured; base punctured: *elytra* with punctured striæ; the punctures orbicular and close set; near the tip obtusely, but not deeply sinuated.

Length less than two-fifths of an inch.

Resembles the A. *fulva*, Ill. particularly in the form of the thorax. The colour has sometimes a very slight metallic tinge but never so obvious as in the *fulva*.

9. A? *grossa*, Alternate interstitial spaces punctured.

Inhab. North-West Territory.

Body short, robust, convex, blackish piceous: *head* : *thorax* convex, descending much each side, transverse, oblong-quadrate; dorsal line almost obsolete; anterior transverse line hardly obvious; basal margin depressed and somewhat rough; lateral margin depressed, but not elevated except near the posterior angles lightly: *elytra* with a sinus near the tip; striæ well impressed, impunctured; interstitial spaces with from five to eight distinct punctures on the third, fifth and seventh spaces; marginal series of punctures small, almost indistinct.

Length of thorax and abdomen nine twentieths of an inch.

This species I found in the North-Western part of the United States when traversing that country with Major Long's party. It is a remarkable insect, readily distinguishable by the peculiar puncturing of the elytra. I have two specimens, both of which are mutillated, so that I am not perfectly sure it belongs to this genus.

DAPTUS, Dej.

D. *incrassatus*, Dej. This insect appears to be rare. I obtained an individual in Pennsylvania. It has not yet occurred to me in the Western States.

CRATACANTHUS, Dej.

C. *pensylvanicus*, Dej. is a common insect.—But it is not confined to Pennsylvania as the name would seem to imply; it is abundant in this state, and I obtained three specimens near the Rocky Mountains; these are somewhat smaller than the inhabitants of this vicinity, and of a paler colour.

PANGUS, Zeigl.

1. P. *caliginosus*, Fabr. Dejean refers this large species to Pangus, which he makes a division of his genus Selonophorus.

Extract from: "The Disseminator."
June 1830 – Aug 1830.
(A Newspaper published at New Harmony)

(2)

ANISODACTYLUS, Dej.

1. A. *dilatatus*, Black; thorax transverse quadrate, not contracted behind; impunctured; first joint of the antennæ testaceous.

Inhab. Mexico.

Body black, impunctured: *antennæ* not reaching the base of the thorax; first joint pale testaceous, second joint darker, remaining joints blackish: impressed frontal lines very distinct: *thorax* without any appearance of puncture, not narrowed behind; lateral edge regularly arquated; posterior angles rounded; dorsal line not very obvious; basal indentations much dilated, not profound; minute longitudinal lines or wrinkles at the middle of the base, and less obvious ones on the anterior margin: *elytra*, striæ profound, impunctured; interstitial spaces depressed: tip very obtusely sinuous: *abdomen*, terminal and anal segments above punctured.

Length less than half an inch.

This species is closely allied to the A. *cœnus*, Say, and its form is perhaps still more like that of an AMARA in being more obtuse and robust. It is much larger and more rounded behind. It was taken in Mexico by Wm. Bennett and was presented to me by Mr. Maclure.

2. A. *baltimoriensis*, Say, (Harpalus) Trans. Am. Philos. Soc., Dej. Spec. A very bad name, as the species is found as well in Indiana as in Baltimore; but it is a specific name and therefore unchangeable.

3. A. *rusticus*, Say, (Harpalus) Trans. Amer. Philos. Soc.; Dej. Spec.; A. *merulus?* Germar.

A. 4. *cœnus*, Say, (Harpalus) Trans. Am. Philos. Soc.; Dej. Spec.

5. A. *agricolus*, Say, (Harpalus) Trans. Amer. Philos. Soc.; Dej. Spec.

6. A. *carbonarius*, Say. (Harpalus) Trans. Amer. Philos. Soc.

7. A. *lætus?* Dej. An insect is found in this vicinity, which I have referred, but very doubtfully to the lætus.—Its characters correspond to the description, but if it be indeed the same, a very important character must be added. My specimen is a male. The alternate interstitial spaces are cupreous and the remaining part is green. It has a very much dilated, slight indentation behind the middle of the elytra and a smaller one nearer the tip.

August 20, 1830.

OPHONUS, Zeigl.

O. *interstitialis*, Say (Feronia) Trans. Amer. Philos. Soc. Since described by Dejean under the name of Harpalus *obscuripennis*.

HARPALUS, Latr.

1. H. *vulpeculus*, Say, Trans. Amer. Philos. Soc. Since described by Dejean under the name of *nigripennis*. It differs however from his description by having an impressed puncture on the third elytral stria; but I have a variety altogether destitute of the puncture.

2. H. *viridis*, Say, Trans. Amer. Philos. Soc. Subsequently described by Dejean under the name of assimilis.

3. H. *mexicanus*, Dej. Sp. Gen. This appears to be a common species. Mr. Maclure has recently sent me specimens by Wm. Bennett, and I obtained it also in that country.

4. H. *iricolor*, Say, has been recently described by Dejean under the name of dichrous. I obtained a specimen formerly with a collection I purchased in New York as having been received from New Haven, and I have since found two in Indiana.

5. H. *terminatus*, Say, (Feronia) Trans. Amer. Philos. Soc. Dejean Sp. Gen. refers this species to the present genus. The anterior pairs of the tarsi of the male are clothed with dense hairs beneath.

6. H. *amputatus*, Elytra greenish, truncate at tip.

Inhab. N. W. Territory.

Body blackish; *head* with the frontal lines rather slightly indented: *antennæ*, *palpi*, *tibiæ*, and *tarsi* honey-yellow, the tibiæ darkest: *thorax* with the basal angles rounded; edge obscure rufous; dorsal line obsolete, or slightly impressed; basal lines substituted by dilated, slightly indented spaces, in which are numerous small punctures; posterior lateral margin with small punctures; basal margin obsoletely tinted with greenish; *elytra* with impunctured striæ, more or less green, sometimes bright green; suture, outer and terminal edges obscure rufous; tip widely and somewhat obliquely truncate.

Length less than two-fifths of an inch.

Var. a. Elytra reddish-brown, with hardly any tint of green.

Readily distinguished by the truncated appearance of the tip of the elytra, from H. *aeneus*, F. which has the elytra decidedly sinuate at tip and even abruptly so.

7. H. *ocreatus*, Black-green; impunctured; feet pale-yellowish.

Inhab. Mexico.

Body very dark green, impunctured: *head* black, with hardly any appearance of green; *antennæ* honey-yellow, the joints, excepting the first and second, with darker centres: *palpi* and base of the *mandibles* honey-yellow: *labrum* with a slight projecting angle in the middle of the emargination: *thorax* blackish-green, hardly narrower at base; dorsal line indistinct, but more obvious in the middle; basal indentations dilated not profound; lateral edge dull honey-yellow; posterior angles obtuse: elytra obviously tinged with green; a little wider at base than the thorax: striæ very slender, impunctured; interstitial spaces flat, third space with a puncture at three-fourths the length from the base; lateral edge near the tip and suture near the tip obscurely piceous; tip deeply and rather obtusely sinuous: *beneath* black, the greenish tinge hardly perceptible: *feet* yellowish; *tarsi* rather darker; first joint of the anteriors of the male somewhat smaller than the second, these tarsi have beneath close set hairs.

Length over seven-twentieths of an inch.

This species has almost the Amara like form of some species of Anisodactylus, in which genus I should have placed the species but for the angle in the emargination of the mentum. It is very closely allied to *terminatus*, Say, but is rather more robust, the head and thorax are differently coloured, the posterior lateral margin is more depressed, &c. It must resemble closely H. *agilis*, Dej. of which it may possibly be a variety.

It was obtained by Wm. Bennett, and presented to me by Mr. Maclure.

STENOLOPHUS, Meg. Dej.

S. *cinctus*, Dark piceous; margin and suture of the elytra honey yellow; feet pale yellow.

Inhab. Massachusetts.

Body blackish piceous: *antennæ* fuscous, three basal joints and *labrum* honey yellow: *mandibles* piceous, black at tip: *thorax* rather convex, a little narrowed behind grad-

ually; base rectilinear, each side a little arquated to the posterior angles, which are obvious but almost rounded; lateral edge but slightly arquated, nearly rectilinear behind the middle, near the posterior angle hardly perceptibly excurved; dorsal line very distinct; anterior transverse line distinct, obtusely arquated; basal lines so much dilated as to extend to the lateral angle, including a few sparse, profound punctures; base and tip and exterior edge paler piceous: *elytra* with impunctured, deeply indented striæ, less profound towards the margin; rudimental striæ none; sutural interstitial space paler piceous; dilated exterior margin honey yellow; lateral series of punctures, with the exception of a small one, widely interrupted in the middle: *feet* pale yellow.

Length less than three twentieths of an inch.

For this insect I am indebted to Dr. Harris. On a cursory examination I considered it identical with S. *ochropezus*, Say, notwithstanding its great inferiority of size, which may at once distinguish it. The thoracic posterior angles are much more obtusely rounded in that species, the punctures of the basal lines are much more numerous and extend nearly to the basal middle, the dorsal line is obsolete &c.

ACUPALPUS, Latr. Dej.

1. A. *partiarius*, Say, (Trechus) Trans. Philos. Soc. Since described by Dejean under the name of *testaceus*. I have recently received a specimen from Louisiana, for which I am indebted to Mr. J. Barabino.

2. A. *conjunctus*, Say, (Trechus) Trans. Amer. Philos. Soc. Since described by Dejean under the name of *miselus*.

3. A. *rupestris*, Say, (Trechus) Trans. Amer. Philos. Soc. Since described by Dejean under the name of *tantillus*.

4. A. *debilipes*. Piceous-black; base of the antennæ and feet pale yellowish.

Inhab. Indiana.

Body very dark piceous, almost black: *head* impunctured; between the antennæ on each side a dilated very obvious indentation: *antennæ* brown, three basal joints yellowish: *mandibles* at tip black: *palpi* yellowish rather pale: *thorax* widest before the middle, gradually narrowed, by a regular arquation of the edge, to the base; basal angle obtusely rounded: anterior and posterior margins on their

middles obviously piceous; dorsal line well impressed, very distinct, not abbreviated; anterior transverse line obvious in all its length, arquated; basal lines dilated, orbicular, obvious, with a few, small, sparse punctures within or rather near the base: *elytra* with slender striæ; interstitial spaces flat, third with a puncture between the middle and tip; marginal and sutural edges towards their tips piceous; rudimental striæ none, but instead of it is a puncture at base of the second striæ: *feet* pale yellow.

Length less than three twentieths of an inch.

5. A. *obsoletus*, Dark piceous; striæ of the elytra obsolete.

Inhab. Mexico.

Body dark piceous, impunctured: *antennæ, labrum* and *palpi* honey-yellow; *thorax* with pale piceous anterior and basal margins; lateral margin with eight or nine hairs; dorsal line almost obsolete; basal impressions dilated, oval: *elytra* with the basal, exterior and apicial margins paler piceous; striæ obsolete, excepting the subsutural and lateral ones; a series of large punctures behind the middle of the exterior margin: *feet* pale honey-yellow.

Length one fifth of an inch.*

BEMBIDIUM, Latr.

1. B. *inæquale*, Say, Journ. Acad. Nat. Sc. Vol. 3. p. 151—Very closely allied to paludosum, Panz. and may possibly be only a variety of that European species, nevertheless it is somewhat smaller, the thoracic impressed lines are more distinct, particularly the transverse basal one and the striæ of the elytra are more dilated and the punctures more obvious. As it is the analogue of paludosum it belongs to the genus Bembidium, as at present restricted.

2. B. *honestum*, Say, Trans. Amer. Philos. Soc. When describing this species I stated that the elytral striæ are "not *obsolete behind*." This may be corrected by substituting the phrase *almost obsolete behind*. The punctures of the striæ are large and obvious at base, but are obsolete, or rather, entirely wanting on the posterior third. The exterior margin and epipleura are blackish green.

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* Count Dejean has done me the favour to send me the four Volumes of his "Species des Coléopterès" which have now been published. This work is indispensable to all those who study the Coleoptera. It contains the descriptions of a great number of North American species, and has greatly facilitated my examination of the insects described in the preceding part of this paper.

3. B. *punctatostriatum*, Say, Trans. Amer. Philos. Soc. The posterior angles of the thorax are very acute; the basal and anterior margins are slightly longitudinally wrinkled, the dorsal line transversely wrinkled on its margins, and the basal lines are obliquely wrinkled; the sides of the thorax are also somewhat undulatedly wrinkled. The third interstitial space is much wider than the others, and the posterior puncture is much nearer to the anterior puncture than to the tip.

4. B. *lævigatum*, Say, Trans. Amer. Philos. Soc. The basal thoracic lines are much dilated.

5. B. *coxendix*, Say, Journ. Acad. Nat. Sc. 3, 151. Antennæ with the three basal joints and base of the fourth pale yellowish; palpi (in the dry state) pale yellowish, dusky at tip: face with an impressed line each side: vertex longitudinally wrinkled: thorax with the posterior margin a little depressed; surface somewhat wrinkled transversely and at base longitudinally: basal indentations dilated, minutely rugose: *elytra* with the anterior and posterior discs obscurely testaceous.—I am not so fortunate as to possess definitions of the several genera into which this genus, as originally constructed by Latreille, has been recently divided; but I rather think, by analogy, that the present species is a *Peryphus*, Meg.

6. B. *dorsalis*, Say. Trans. Amer. Philos. Soc. This species varies considerably. The dorsal line is more or less obvious, and sometimes rather deeply impressed. In one specimen is a slight appearance of puncturing on the middle of the thoracic base. The thorax is more or less engraved with undulated lines, which are sometimes almost imperceptible. Perhaps a Notaphus, Meg.

7. B. *tetracolum*, Say, Trans. Amer. Philos. Soc. Allied most closely to Peryphus rupestris, Illig. than which it is somewhat larger.

8. B. *postremum*, Blackish; elytra brownish, obscure yellowish at tip.

Inhab. Pennsylvania.

Head greenish black; *face* with an indented line each side, between which and the eye is a large orbicular puncture: *antennæ* fuscous, piceous at base: *palpi* dark honey yellow: *mandibles* at base piceous: *thorax* bronze black, very obscurely piceous on the middle of the anterior margin; contracted behind; posterior angles obtuse-angular; dorsal

line impressed; anterior, transverse very obvious, arquated; basal lines dilated, suborbicular; basal margin with slight inequalities or punctures between the basal lines; a slightly elevated line on the lateral margin, forming a groove with the slightly elevated edge, more obvious near the angle and becoming obsolete before: *elytra* very dark honey yellow, or brownish, much paler at tip; striæ somewhat dilated, and with dilated, quadrate, profound punctures: striæ more slightly impressed towards the tip and the punctures obsolete; third interstitial space a little broader than the others, with a puncture before the middle and another equidistant behind the middle, both nearer the third striæ: wings perfect: *beneath* black: *abdomen* tinged with piceous: *feet* pale yellowish.

Length one-fifth of an inch.

Resembles *tetracolum* Say, but the elytral striæ are more dilated, the punctures of the third interstitial space are more anterior and the posterior pale spot of the elytra is quite terminal. Belongs to the genus Peryphus, Meg.

9. B. *nigrum*, Say, Trans. Amer Philos. Soc. The striæ are so much dilated that no punctures are visible on the third interstitial space.

10. B. *sigillare*, Cupreous; elytra with two, dilated, subquadrate, green spots on each; fourth striæ rectilinear.

Inhab. Missouri.

Body bronzed-cupreous, somewhat polished: *head* greenish each side and before; an impressed line near the eye, between which and the eye is a dilated puncture: *antennæ* blackish-green, first joint beneath piceous: *palpi* black-piceous, tinged with green: *thorax* rather broader behind than before; posterior angles acute; lateral edge excurved behind; dorsal line distinct, but not deeply impressed, not abbreviated; basal lines dilated: *elytra* with punctured striæ, punctures almost obsolete towards the tip; fourth stria not undulated; third interstitial space as broad as the seventh and with two dilated impressed subquadrate spots, green and including each a puncture, and placed near the middle: *beneath* dark green: *feet* blackish-green; *tibiæ* and base of the *thighs* piceous greenish.

Length less than one-fourth of an inch.

I obtained this species during the journey of Major Long's party to the Rocky Mountains. It is very distinct from the *inæquale*, Say, which it somewhat resembles, by

many characters. That of the rectilinear fourth stria of the elytra, is an obvious one.

11. B. *semifasciatus*, Greenish black; elytra each with four spots; third interstitial space two punctured.

Inhab. Mexico.

Head metallic green; two impressed lines between the antennæ very distinct: *antennæ* dull piceous: *labrum* and *palpi* blackish: *thorax* metallic green with a slight tinge of cupreous; dorsal line slender; lateral indentation of the base obvious, bounded near the angle by a carinate, abbreviated line; lateral edge with a hair rather before the middle and another at the posterior angle, not arquated from behind the middle to the basal angle: *elytra* blackish with a slight cupreous tinge, with well impressed punctured striæ, distinct to the tip; interstitial lines depressed, plane: third line with a transverse indentation before the middle and a less distinct one behind the middle; a dull honey-yellow dot on the middle of the base, a semifascia before the middle, another behind the middle, and an irregular apicial spot: *beneath* black: *feet* piceous.

Length over three-twentieths of an inch.

Resembles N. *ustulatus*, Fabr. and therefore probably is a Notaphus, Meg.

12. B. *oppositum*, Say. Resembles the maculatum, Gyll. and probably belongs to Lopha. The sutural stria is impressed from the middle of the tip. It is somewhat bronzed.

13. B. *ephippiatum*, Pale testaceous; elytra with punctured striæ and a large common blackish spot.

Inhab. Indiana.

Body pale testaceous or honey yellow; *antennæ* paler than the head, a little darker towards the tip: *palpi* colour of the antennæ: *thorax* widest before the middle, gradually contracting by an almost rectilinear, but hardly perceptibly concave line, to the basal angle, which is rectangular; dorsal line but slightly impressed, obsolete before; basal lines hardly distinct from the depressed basal margin, which is minutely wrinkled: *elytra* with impressed, punctured striæ, obsolete at tip; seventh stria wanting; third interstitial line with two small orbicular punctures, one before the middle and the other a little behind the middle; a very large, common blackish spot on the middle, within which the suture is reddish brown; suture behind the spot blackish; a

small, obsolete blackish spot at base each side of the scutel: *feet* pale yellowish.

Length one-tenth of an inch.

At first view it resembles *proximus*, Say, both as respects size and colour, but it may be distinguished by many characters, of which the punctured striæ is one.

14. B. *tripunctatum*, Piceous; elytra with five abbreviated striæ; thorax three punctured between the dilated basal lines.

Inhab. Indiana.

Body piceous; head and thorax darker: *antennæ* light brownish, paler at base: *palpi* pale yellowish: *thorax* with the dorsal line distinct, terminating on the basal margin in an impressed puncture, on each side of which is another rather smaller puncture; basal lines much dilated, deeply undulating the posterior edge of the thorax: *elytra* with about five, rather obtuse striæ, not extending to the tip or base; sides destitute of striæ excepting a marginal interrupted one: an indentation each side of the scutel and on the humerus.

Length four-fifths of an inch.

The dilated basal thoracic lines deeply indenting the posterior edge, together with the three intervening punctures, will readily distinguish this species. At first view it resembles B. *flavicaude*, Say, but is more highly polished.

15. B. *incurvum*, piceous; elytra with a honey yellow vitta from the humerus, a little dilated at its termination before the tip.

Inhab. Indiana.

Body piceous: *head* blackish-piceous: *antennæ* honey yellow: *thorax* a little contracted gradually to the base; dorsal line slender and slightly impressed; basal transverse line deeply impressed, with numerous minute wrinkles; basal lines dilated, undulating the posterior edge; *elytra* polished, with a profoundly impressed, somewhat dilated, simple, sutural stria; the second stria obsolete; an interrupted stria on the lateral margin; a dilated indentation each side of the scutel, and a smaller one on the humerus; a dilated vitta from the humerus, near its tip curves a little towards the suture, and is in that part a little more dilated: *venter* black piceous: *feet* honey yellow.

Length over four-fiftieths of an inch.

Resembles the preceding, but is destitute of the three punctures at the base of the thorax, and with that species belongs probably to Peryphus, Meg.

Of the genus Bembidium, Latr. I have twenty two described species natives of North America.

DYTISCUS, Linn. Latr.

1. D. *confluens*, Blackish-brown, margined with honey-yellow; four exterior grooves of the elytra nearly or quite geminately confluent at tip.

Inhab. Maine.

Body blackish-brown with a green reflection, covered above with minute punctures: *head* dark green, with a frontal rufous semicircle, divaricating at its anterior tips into a more dilated spot between the canthus of the eye and the nasus, which is yellowish, excepting the anterior edge; above the nasus a transverse impressed line, ending each side in a more dilated spot: *thorax* margined all around with honey yellow; anterior margin with a somewhat double line, of which the posterior one is obsolete; posterior margin with the yellow colour, near the lateral angles, contracted or almost obsolete: *elytra* with about ten grooves which extend three-fourths the distance to the tip, the four exterior interstitial spaces confluent, or nearly so, by twos; lateral margin not dilated, honey-yellow with an obsolete branch towards the tip proceeding obliquely to the suture: *beneath* honey-yellow, sutures more or less margined with black.

Length one inch and a half.

This fine large species was sent me by Dr. E. Holmes of Gardiner Lyceum, together with many other interesting objects of Natural History. It is more than double the size of D. *fasciventris*, Say, and may also be distinguished from that species by the confluent termination of the four exterior grooves of the elytra in the female.

It is less dilated than the *latissimus* Fabr. and is destitute of the wide elytral margin.

2. D. *habilis*, Blackish olivaceous; thorax and elytra margined with yellow; elytra with three series of punctures.

Inhab. Mexico.

Body oval; *above* with minute, distant punctures: *head* with a frontal rufous angular line or semicircle, divarica-

ting at its anterior tips into a more dilated spot between the canthus of the eye and the nasus, which is yellow excepting the anterior edge; above the nasus on each side is an orbicular, punctured indentation; front each side at the eye with an indented, punctured line: *thorax* with a broad yellow margin; dorsal line acute, distinct, not extending upon the margins; a line of impressed punctures on the anterior margin interrupted in the middle; lateral margin not at all depressed: *scutel* honey-yellow on the posterior submargin: *elytra* with three series of impressed punctures; the exterior series less distinct; general puncturation near the tip much larger and more obvious; posterior margin yellowish with an obsolete undulated branch proceeding obliquely towards the tip: *beneath* varied with blackish, piceous and yellow.

Length one inch.

A male of this species was taken by Wm. Bennett in the River beyond Vera Cruz, and, together with the two following, presented to me by Mr. Wm. Maclure. It is allied to the D. *marginalis*, F. but that species in form approaches the ovate; the present also is much smaller and oval.

3. D. *bimarginatus*, Black; head and thorax rufous; elytra with a yellow vitta on the lateral submargin.

Inhab. Louisiana.

Body oval, blackish: *head* honey-yellow, posteriorly black; *palpi* and *antennæ* yellowish: *thorax* honey yellow; posterior margin black, which is more dilated on the middle half: *elytra* with three series of distant slight punctures; on the lateral submargin a yellow vitta, which passes a short distance on the humeral base, and posteriorly diverges a little from the margin, attenuates, and does not reach the tip; margin and epipleura dull rufous, not reaching the tip: *beneath* piceous black: *pectus* and *anterior feet* yellowish; terminal joints of the tarsi piceous: *posterior pairs of feet* piceous; intermediate thighs dull yellow: *venter* each side with obsolete piceous spots.

Length less than half an inch.

For this species I am indebted to the politeness of Mr. J. Barabino, who sent it to me from New Orleans.

COLYMBETES, Clairv.

1. C. *tæniolis*, Say (Dytiscus) Trans. Amer. Philos. Soc. In Mexico is a variety, being smaller. The specimen is a male and proves that the species must be placed in the present genus. It was taken in the River beyond Vera Cruz.

2. C. *gutticollis*, Thorax yellowish with four black spots; head black, anteriorly and band of the vertex yellow.

Inhab. Mexico.

Head black; a transverse yellowish band between the nearest points of the eyes; a dilated yellowish triangle occupying all the anterior part of the head, the apex being at the middle of the face: *antennæ* and *palpi* honey-yellow, dusky at their tips: *thorax* honey-yellow, anterior margin blackish; posterior margin dusky; four large black spots in a transverse series, the two intermediate ones nearer together: *elytra* honey-yellow with minute black points more or less crouded so as to give a dusky, sometimes almost blackish appearance; lateral margin destitute of black punctures, but with a black line on the posterior curvature; at base, particularly the humeral base, destitute of the black punctures; three regular series of small black dots: *beneath* black; *pectus, feet,* and *epipleura* yellowish.

Length over two-fifths of an inch.

Taken in the River beyond Vera Cruz.

It is about the size of the C. *adspersus*, F. which it considerably resembles, if we except the thoracic black dots.

2. C *fenestralis*, Say. Trans. Amer. Philos. Soc. Since described by Germar under the name of *biguttulus*, Sp. Insect. p. 29.

3. C. *interrogatus*, Fabr. Syst. Eleut.

C. *venustus*, Say, Trans. Amer. Philos. Soc. When describing this species I stated that it "may probably prove to be the *interrogatus* of Fabricius." Of this I have now so little doubt, that I venture to reject the name I then provisionally gave and to adopt the true, or anterior name.

Dejean is also of the opinion that it is the *interrogatus*, F.—Sturm, however, considers it distinct.

COPTOTOMUS, Nob.

Tarsi distinctly five jointed; basal joints of the anterior pair of the male subequally dilated or gradually tapering; posterior nails appressed together and apparently single; pos-

terior feet nutatory, base of the thighs naked; antennæ eleven jointed, at least as long as the head and thorax, filiform; scutel distinct; terminal joint of the palpi somewhat compressed at tip and emarginate.

OBSERVATIONS.

This genus differs from other genera of this family in the character of the emarginate palpi, excepting the genus Noterus which is destitute of an apparent scutel and the emargination of the palpi is confined to the labiales. The name is derived from the words *copto* I cut, and *tome* joint or articulation, in allusion to the form of the palpi.

SPECIES.

C. *serripalpus*, Yellowish; elytra brownish varied with whitish.

Inhab. Mexico.

Body oblong-oval, honey-yellow: head black on the posterior margin: *labial palpi* with the penultimate joint crenate or bituberculate before: *thorax* on the middle of the anterior and posterior margins broadly black: *elytra* brownish, with very numerous, minute honey-yellow points; two very slightly impressed striæ, with punctures hardly distinguishable from minute inequalities of the surface, and an indistinct part of a series of hardly impressed punctures each side; from the base near the scutel proceeds a whitish broad vitta one-fifth of the length of the elytra, bifid at tip; from the humeral base to the tip proceeds a broad, interrupted and somewhat irregular vitta also whitish: *venter* piceous.

Length less than three-tenths of an inch.

This insect was obtained on the estate of the Conde del Regla about 10 leagues N. E. of the city of Mexico by Wm. Bennett and presented to me by Mr. Wm. Maclure. It cannot be the Dytiscus circumscriptus, Germ. which is "breviter ovali."

LACCOPHILUS, Leach.

1. L. *maculosus*, Say, Trans. Amer. Philos. Soc. Since described by Germar, also under the name of *maculosus*, Sp. Gen. p. 30.

HYPHIDRUS, Latr.

H. *punctatus*, Say, (Laccophilus) Journal of the Acad. Nat. Sc.

HYDROPORUS, Clairv.

1. H. *bifidus*, Elytra with a subsutural impressed, punctured stria.

Inhab. Mexico.

Body black: *head* with much dilated indentations between the eyes; a longitudinal honey yellow line, more dilated before: *antennæ* yellowish, dusky at tip: *thorax* with a submarginal honey-yellow band before, having three processes, one in the middle and one, rather more dilated, on the lateral margin, not reaching the posterior edge: *elytra* with a very distinct, punctured, impressed, subsutural stria, and about two other hardly obvious ones near the middle; bifid yellowish lines at base and near the tip; *feet* dark honey yellow.

Length less than one fifth of an inch.

This species and the two following were taken by Wm. Bennett in a small river beyond Vera Cruz, and were presented to me by Mr. Maclure.

2. H. *nudatus*, Beneath black; feet yellowish; thorax and head on their disks yellowish; elytra blackish with lines and tip yellowish.

Inhab. Mexico.

Head with numerous deep punctures, honey-yellow on the disk, blackish each side and behind: *antennæ* pale yellowish, dusky at tip: *thorax* with numerous deep punctures, more dense and obvious towards the base; honey-yellow, anterior and posterior margins dusky: *elytra* brownish-black, with numerous, profound, approximate punctures; stria not distinct, but traces of two may be discovered near the base; about four, more or less confluent lines at base, irregular ones each side and tip dull whitish yellow: *beneath* black, pectus yellow; *feet* honey-yellow.

Length over three-twentieths of an inch.

3. H. *sericatus*, Yellowish; elytra blackish with abbreviated lines and margin dull yellowish.

Inhab. Mexico.

Dull honey yellow, somewhat sericeous above: *head* with a dilated, not profound, indentation each side, and numerous small punctures: *antennæ* also honey-yellow: *thorax* a little dusky on the anterior and posterior margins, with numerous, small, slightly impressed punctures: *elytra* dark

brownish, almost black, more obviously sericeous than the thorax; striæ none; lateral margin dull honey, dilated near the base into a band of about four abbreviated, unequal, longitudinal lines excepting the inner one, not reaching the base, another somewhat similar band behind the middle, and slight double dilatation at tip of the same colour.

Length less than one-fifth of an inch.

This species was obtained in the same locality with the preceding. It is closely allied to *undulatus*, Say, but is more sericeous, the elytral lines are not so dilated or confluent, &c.

4. H. *interruptus*, Black; feet, frontal line, three thoracic spots, and many elytral abbreviated lines yellowish.

Inhab. Pennsylvania,

Body blackish: *head* with a slight piceous tinge; an anterior honey-yellow triangular spot, the superior angle near the vertex: *antennæ* pale yellow, dusky at tip: *thorax* obsoletely tinged with piceous; a lateral irregular spot, and a dorsal, longitudinal, somewhat fusiform one, honey yellow; *elytra* with an oblique impressed line at the inner angles, a slightly impressed subsutural stria, and an obsolete one on each side of the middle; lateral margin with two slender oblique branches before the middle, slender subsutural vitta exterior to the stria, interrupted line or two along the middle, a small spot behind near the middle and about two transverse series of two or three short lines, dull honey yellow: *beneath* black: *pectus, feet* and *epipleura* yellowish.

Length over three-twentieths of an inch.

5. H. *discicollis*, Reddish brown somewhat sericeous, minutely punctured, middle of the thorax without punctures.

Inhab. N. W. Territory.

Body entirely dark reddish brown, with minute punctures: *head* : *thorax* with the disk impunctured, polished and a little more convex; elytra darker than the thorax, more obviously sericeous; lateral margin a little paler; spot at the tip dull yellowish: *postpectus* black piceous.

Length three-twentieths of an inch.

I obtained an individual of this species during Long's Expedition to the source of St. Peter's River, and although

it is now mutilated, yet I have no hesitation in giving it as distinct from any other I am acquainted with.

HALIPLUS, Latr.

H. 12-*punctatus*, Say. Some specimens were found in Mexico, in the locality above mentioned by Wm. Bennett and presented to me by Mr. Wm. Maclure. They vary a little from those of this region in being very slightly more elongated and larger; but the spots, their arrangement and the sculpture appear to be precisely the same. The species is therefore found over the greater part of North America East of the Rocky Mountains.

NOTERUS, Latr.

N. *bicolor*, Honey-yellow; elytra black, punctured.

Inhab. Louisiana.

Head and *thorax* honey yellow: *eyes* black: *palpi* not deeply emarginate: *elytra* black, punctured; at tip obsoletely piceous, very obliquely and slightly truncate; acute: beneath honey yellow, or piceous.

Length one-tenth of an inch.

For this species I am indebted to Mr. Barabino.

HYDROCANTHUS, Say.

H. *atripennis*, Ferruginous; elytra black.

Inhab. Mexico.

Head and *thorax* ferruginous; the former with an oblong triangular, obsolete, darker spot between the eyes, and the latter with an impressed line on the lateral submargin: *elytra* blue-black, immaculate, impunctured: *pectus*, as well as the head beneath, dull yellowish; sternum flat, at its anterior tip acute, but not prominent, dusky: *postpectus* blackish, dull yellow at tip: *feet*, intermediate and posterior pairs blackish, slightly varied with piceous.

Length less than one-fifth of an inch.

This is the second species of this genus; the first I published in the Trans. Philos. Soc. of Philadelphia, New Series, Vol. 2——. The genus is allied to Noterus, Latr. but the labial palpi are much more dilated and have no appearance of emargination.

GYRINUS, Linné.

1. G. *emarginatus*, Say. Trans. Amer. Philos. Soc.

Since described by Germar under the name of *vittatus*, Spec. Nov.

2. G. *analis*, Say. Trans. Amer. Philos. Soc. Germar is of opinion that this is the same as *natator*, F.; but on comparison, I find it to differ in many small characters, the most obvious one of which is the colour of the epipleura, that of the *natator* being light piceous whilst in the *analis* it is of a bronzed-black, &c. It is no doubt a closely allied species.

3. G. *obtusus*, Black; feet honey-yellow; behind obtuse.

Inhab. Mexico.

Body black, polished: *head* with two indented dots between the eyes: *mouth* piceous: *antennæ* piceous-black: *thorax* with the anterior lateral, posterior lateral and medial impressed lines very distinct: *elytra* obtuse behind and widely truncate; near the tip obviously depressed; punctures well impressed, in regular series, the intervals not impressed: *beneath* dark piceous, somewhat paler on the edges of the segments: *feet and tip of the venter* honey-yellow.

Length over one-fifth of an inch.

It may be distinguished from the *analis* and *limbatus*, Nob. and from the *natator*, Fabr. and *marinus*, Gyl. in being more obtuse behind and the consequent greater truncation of the elytra.

4. G. *parcus*, Black; feet honey-yellow.

Inhab. Mexico.

Body rather robust, black, highly polished: *head* with two indented, oblique lines between and before the eyes: *thorax* with the impressed lines very obvious: *elytra* with very distinct, well impressed series of punctures, the intervals not at all impressed; tips obtusely rounded: *feet* honey yellow.

Length nearly one-fifth of an inch.

In comparison with *minutus*, Fabr. this species is a little longer and much more robust, more highly polished and the impressed lines of the thorax and dots of the elytra are more profound and distinct. It is somewhat smaller than either of those I have before described, and the punctures of the elytra are, notwithstanding, larger.

STAPHYLINUS, Linn. Grav.

1. S. *ephippiatus*, Black, elytra rufous.

Inhab. Mexico.

Body black, polished: *head* with a longitudinal, impressed line between the eyes; superior orbits with three or four punctures, above these a lateral series of four or five punctures, and two or three insulated ones, and at base each side a transverse series of four or five punctures; *antennæ*, terminal joint obliquely truncate: *thorax* semioval, with a few scattered punctures each side, an abbreviated dorsal series of four or five punctures not extending on the posterior third of the length of the thorax: *scutel* densely punctured, black: *elytra* cinnamon-rufous, with very numerous small hairs and slightly impressed punctures: *tergum* a little hairy; deep, blackish-blue, iridescent: *palpi* piceous.

Length over half an inch.

This and the following species belong to Family 1st of Gravenh. Monogr.

2. S. *connexus*, Black; elytra and feet rufous.

Inhab. Mexico.

Body black, polished: *head* with punctured orbits and a few scattered punctures each side: *palpi* piceous-black; a deep and wide indentation between the antennæ, on each side of which above is a single puncture: *thorax* with a series of about five large dorsal punctures and a few scattered lateral ones: *antennæ* cinnamon-rufous, with very short hair and minute punctures: *feet* colour of the elytra.

Length over three-tenths of an inch.

Resembles the preceding, but the feet are rufous, and the tergum is simply black; the clypeus is a little advanced in the middle. Fam. 1st.

3. S. *iracundus*, Black; elytra rufous; dorsal thoracic punctures three.

Inhab. Indiana.

Head with an orbital puncture and three occipital punctures, of which the anterior one is near the eye and larger: *antennæ* piceous; flagellum fuscous; the joints a little broader than long; terminal joint with the apex rather prominent: *mouth* dull piceous: *occiput* with numerous small punctures: *thorax* with three small dorsal punctures,

not reaching the middle of the length; lateral punctures about five, the second and fifth placed a little above the straight line; marginal punctures two or three; towards the anterior angles are numerous obsolete discoidal punctures, visible with a strong power: *scutel* glabrous, black: *elytra* rufous, densely punctured, with short prostrate hairs: *tergum* at tip slightly tinged with piceous: *tibiæ, tarsi* and posterior margins of the ventral segments piceous.

Length over seven-twentieths of an inch.

This species seems to have some relation to the *laticollis* Grav. but the thorax is less dilated, the lateral puncturations are much more numerous; the elytra are of a different colour, &c. Fam. 1st.

4. S. *blandus*, Grav. The reddish colour of this handsome insect is of a tint approaching sanguineous.

Gravenhorst had probably old specimens of which the colour had faded. He describes the feet as "rufo-testacei," but in my specimens the tibiæ and tarsi are piceous. He says "coleoptera depilia" but my specimens certainly have prostrate hairs on the elytra as well as on the scutel. If this is not in reality Gravenhorst's species, it differs in the exceptions I have stated and can be called *lætulus*. Fam. 1st.

5. S. *inversus*, Black; dorsal thoracic punctures three.

Inhab. Indiana.

Head with an orbital puncture, and another above the eye: *mouth* and *antennæ* piceous; joints of the flagellum rather transverse, point of the last joint not prominent: *thorax* a little narrowed before; dorsal punctures three, the series nearer each other at tip than near the head and hardly reaching the middle of the length; lateral two, remote, with a single puncture midway between the second and the dorsal series; marginal one: *scutel* glabrous, impunctured: *elytra* on the disk with but very few hairs; punctures few, distant, almost to be traced into obsolete series; laterally with small punctures, furnishing short hairs: *tergum* in some lights, slightly iridescent towards the tip: *beneath* very obscurely piceous: *feet* piceous.

Length nearly three-tenths of an inch.

The two dorsal series of punctures in other species diverge a little posteriorly, but in the present species they evidently approach towards their posteriort erminati on. Fam. 1.

6. S. *dimidiatus*, Blackish; elytra and margins of abdominal segments reddish brown; feet pale.

Inhab. U. S.

Body piceous-black: *head* oval black, with two punctures between the eyes, two punctures on the posterior anthus and five or six behind: *mouth* piceous: *antennæ*, first and second joints and part of the third yellowish, or reddish brown more or less pale: *thorax* black, with a tinge of piceous; dorsal series five and an equal puncture more distant than the others, near the anterior margin, and a little exterior to the line of the series; lateral punctures two, or in a much curved line three; marginal two: *elytra* reddish-brown, with prostrate hairs: *abdomen*, segments reddish-brown on their posterior margins: *feet* yellowish, or pale reddish-brown.

Length nearly one-fifth of an inch

I have found specimens in Pennsylvania and Missouri. The reddish-brown colour of the posterior margins of the abdomen, is obvious beneath. Fam. 1st.

7. S. *tachiniformis*, Black; thorax sanguineous; feet piceous.

Inhab. Mexico.

Body black: *head* rather small, oval, polished; with two punctures each side between the eyes, and eight or ten behind the eyes: *antennæ* fuscous, dark piceous at base: *mouth* piceous: *thorax* sanguineous; dorsal punctures five distant from the base and tip; lateral two; marginal three placed triangularly: *elytra* with a slight, obscure metallic tinge, with numerous minute punctures furnishing prostrate hairs: *feet* honey-yellow; posterior pair and *tibiæ* and *tarsi* darker.

Length one-fourth of an inch. Fam. 1st.

8. S. *apicialis*, Black; terminal joint of the antennæ and abdomen towards the tip, rufous.

Inhab. U. S.

Body black, polished, punctured: *head* with numerous punctures, smooth in the middle: *antennæ* with the terminal joint yellowish-rufous: *mandibles* piceous: *palpi* with the terminal joint rather long, slender, piceous: *thorax* with numerous not crouded punctures, with a longitudinal, dila-

ted, glabrous line: *scutel*, punctures, minute, dense: *elytra* with a subsutural line and numerous, small punctures furnishing hairs: *abdomen* towards the tip dull rufous: *feet* piceous-black.

Length nearly two-fifths of an inch. Fam. 3rd.

9. S. *cyanipennis*, Fabr. The allied species of the United States was considered by Gravenhorst as a variety only of the European species. I have not at present in my collection the true cyanipennis of Europe to compare, but as Gravenh. mentions a difference in the size of the head, it may yet prove to be a distinct species and if so the name proposed by Knock, S. *cyanopterus*, will be an appropriate one. —Fam. 1st.

10. S. *viduatus*, F. This name has the priority over that of maculosus Grav. Belongs to family 4. It is singular that Gravenhorst in his revised work the "Monographia" quotes the proper name of this insect and yet retains the synonym of maculosus as the true name, although it was given by himself a year after the Fabrician name.

11. S. *violaceus*, Grav. This species is subject to vary considerably; the "linea media longitudinali lævi" of the head is very commonly obliterated by punctures, and there exists a variety, of which the elytra are tinged with greenish, or are dusky brassy. Belongs to Fam. 3.

12. S. *umbratilis*, Grav. My specimens, five in number, have about five punctures in the dorsal series, neither of them has four only as stated in the description. Belongs to Fam. 1st.

13. S. *ater*, Grav. In my cabinet I find that I formerly placed this species under the genus Astrapæus, Grav. from the circumstance that the terminal joints of the palpi are more dilated than in any other species of Staphylinus, that I am acquainted with. The terminal joint of the maxillary palpi, is not longer than the penultimate one and the diameter is nearly, if not quite as great; the terminal joint of the babial palpi is very obviously dilated, oval and its transverse diameter is nearly double that of the last joint of the maxillaries. Still however, as neither of these joints can be called securiform agreeably to the essential characters of Astrapæus we must agree with Gravenhorst, and return the

species to his third family of Staphylinus, from which it certainly differs in the characters above stated.

XANTHOLINUS, Dahl.

1. X. *emmesus*, Grav. Coleopt. Micropt. 176 belongs to this genus. It is subject to vary in its colouring; the abdomen is often piceous, and sometimes even still paler.

2. X. *cephalus*, Black; antennæ reddish-brown; *elytra* and *feet* honey-yellow.

Inhab. Virginia.

Body black, polished: *head* elongated, sides parallel, punctured; punctures numerous and larger each side, excepting immediately the line behind the eye obsolete on the longitudinal middle; a larger puncture each side at base; and a slight longitudinal indentation on the basal margin; *thorax* as wide as the head anteriorly, becoming gradually a little narrower to the base; a dorsal series of 5 or 6 punctures; lateral four or five punctures; on the anterior termination of this series a much dilated slight indentation; marginal puncture one; basal edge each side and lateral edge with a series of punctures: *elytra* honey-yellow, irregularly, not profoundly punctured: *pectus* rufous: *feet* honey-yellow: *abdomen* piceous-black.

Length one-fourth of an inch.

The head is large, longer than the thorax. I obtained it on Chinquotege Island.

3. X. *hamatus*, Piceous; antennæ, elytra and feet yellowish.

Inhab. U. S.

Head piceous-black, ovate, with sparse, profound punctures, wanting on the longitudinal middle and immediately in a line behind the eye: *antennæ* reddish-brown, paler at base; *palpi* pale reddish brown: *thorax* rufo-piceous, not distinctly contracted behind; dorsal punctures about ten, with an anterior, nearly parallel, exterior series of about four; lateral series ten or twelve punctured, extending to the locality of the posterior angle, and at its anterior extremity curved outward and backward with four or five additional punctures: *elytra* honey-yellow, sparsely and irregularly punctured; a somewhat elevated line on the sutural submargin: *feet* dark honey-yellow.

Length about one-fourth of an inch.

Remarkable for the number of punctures in the thoracic series.

LATHROBIUM, Grav.

1. L. *similipenne,* Black; members rufous or yellowish.

Inhab. Mexico.

Body black, polished, hairy, densely punctured: *antennæ* reddish brown, 1st and second joints rufous: *labrum* and *palpi* piceous: *thorax* longer than broad, with a longitudinal glabrous line in the middle, and a glabrous basal margin: *elytra,* terminal edge piceous: *tergum* with more minute punctures; more hairy at tip: *feet* honey-yellow; *thighs* pale yellow.

Length two-fifths of an inch.

Like most of the species of this genus the middle of the thorax is destitute of punctures; in this character it also agrees with *Staphylinus violaceus,* Grav.

2. L. *armatum,* Anterior thighs dilated and angulated beneath.

Inhab. Indiana.

Body black; punctured: *antennæ* piceous; 1st joint obconic, not longer than the 2nd and 3d together, which are equal; 4-10 joints moniliform; last joint ovate-acute: *palpi* pale piceous; terminal joint minute, that of the labials longer: *thorax* oblong-quadrate; angles rounded; glabrous line none: *elytra* black-piceous, punctures not deeply impressed; sutural stria distinct: *feet* rufous; *thighs* robust, particularly the anteriors, which have a prominent angle beneath near the tip: *tibiæ* a little dilated and compressed, obliquely truncate at tip; anterior pair with an obtuse sinus on the inner side: *tarsi,* 1st joint not longer than the second; penultimate joint a little lobed beneath.

Length about seven-twentieths of an inch.

I have obtained but one specimen, which is a male. The above description will show that it differs much from any known species.

3. L. *cinctum,* Black, punctured; antennæ and mouth piceous; feet yellowish; posterior margins of the segments of the abdomen rufous.

Inhab. Missouri.

Body black, punctured, hairy; *head* above, punctures dense, distinct, profound, furnishing hairs; on the front sparse, remote; *antennæ* pale piceous, first joint nearly one-third of the entire length, third joint rather longer than the second and with the others obconic, two terminal ones subglobular; *labrum* very short at tip punctured and setous, emarginate in the middle; *mandibles* piceous, prominent, strongly dentate in the middle; *palpi*, maxillaries prominent, pale piceous, terminal joint conic-acute, as large at base as the preceding joint, labiales pale testaceous, minute, throat with an impressed convex line; *thorax* oblong, not wider than the head, punctures numerous, profound, furnishing hairs, angles rounded; *scutel* impunctured; *elytra*, punctures somewhat transversely confluent, a little hairy; *feet* testaceous, thighs paler, anterior thighs near the tip abruptly narrowed beneath, *coxæ* piceous; *pectus* impunctured; *postpectus* and *abdomen* densely and minutely punctured, punctures hairy; segments of the latter with rufoferruginous posterior margins.

Length less than two-fifths of an inch.

Found near Engr. Cantonment on the Missouri.

4. L. *bicolor*, Grav. This is an abundant species, and widely distributed. Nuttall gave me a specimen which he found in Arkansaw; I have taken them in Missouri, Pennsylvania and very commonly in this State. It varies considerably in its shades of colouring. I have an individual of which the thorax is pale yellow.

5. L. *dimidiatum*, Black; thorax and posterior half of the elytra rufous.

Inhab. U. S.

Black: *head* with scattered punctures: *antennæ* fuscous; first and second joints, and *palpi* honey-yellow: *thorax* bright rufous, with a dorsal hardly regular stria of seven or eight punctures, the stria somewhat impressed towards the base; lateral punctures many, not crouded: *elytra* with one or two hardly regular striæ of punctures, and lateral scattered punctures; an indented subsutural line; bright rufous, the basal half black: *tergum* piceous black; segments dull rufous on their posterior margins: *feet* pale yellow.

Length three-twentieths of an inch.

Var. a. Punctures of the thorax a little more regular and

numerous; black portion of the elytra confined to the basal margin and sometimes obsolete.

Punctured somewhat like *longiusculum*, Grav. but is much smaller and differently coloured.

6. L. *sphæricolle*, Blackish; thorax orbicular, convex; antennæ long.

Inhab. Indiana.

Body black piceous: *head* with the carina of the antennæ a little elevated, abrupt before: *antennæ* much thicker towards the tip, rather longer than to the base of the thorax, first joint hardly longer than the second and third together; fuscous, three basal joints honey yellow, fourth and terminal joints obscure honey yellow; larger joints hardly longer than broad: *mandibles* bifid at tip, and with the *palpi* piceous: *neck* distinct: *thorax* nearly orbicular, a little wider before the middle and narrower behind; convex, with sparse black hairs: *elytra* with scattered, upright hairs; subsutural stria deeply indented, particularly towards the base; tip truncate not sinuate; taken together, transverse quadrate: *tergum* black: *feet* yellowish: *thighs* towards the tip piceous.

Length over one-tenth of an inch.

The labrum is longitudinally indented in the middle and at tip is widely, but not very deeply emarginate. The habit differs from that of most of the species, and it cannot be, rigidly speaking, congeneric with *bicolor* and *pallipes*, Grav.

It varies in having the feet entirely yellowish and the tips of the carinæ of the head honey-yellow.

7. L. *millepunctatum*, Piceous; with dense, minute punctures; thorax with a glabrous line, rounded behind.

Inhab. Indiana.

Body dull piceous, with very minute, crouded punctures and small hairs: *head* larger than the thorax, black-piceous, quadrate, almost lobed at the posterior angles: *antennæ* and *mouth* paler, rufous: *thorax*, as in Staphylinus, rounded behind and truncate before; a dorsal, slender, glabrous line: *elytra* paler on the humerus: *tergum* dark piceous, posterior margins of the segments and lateral margin paler: *beneath* honey yellow, head rufous.

Length less than one-fourth of an inch.

The form of the thorax and head is that of a Staphylinus; which together with the dense and minute puncturing, distinguish this species very readily from others.

8. L. *confluentum*, Piceous; densely punctured; thorax short, rounded behind and angulated before each side; head large.

Inhab. U. S.

Body piceous: *head* with close set, discoidal punctures; large, ovate or subquadrate; tips of the carinæ of the antennæ, base of the antennæ and palpi paler: *palpi* with the terminal joint very small: *antennæ* towards the tip moniliform: *thorax* much smaller than the head, paler on the lateral and posterior margins; punctures confluent longitudinally; anterior margin with a short, abrupt neck; anterior angles angulated; behind rounded: *elytra* with small, irregular punctures, furnishing short hairs, almost obsolete at tip; tip paler: *feet* honey yellow.

Length less than three-twentieths of an inch.

I obtained a few specimens at Chincotæge Island, in dung, October. And one in Indiana.

PINOPHILUS, Grav.

P. *latipes*, Grav. In his last work this author abolishes this genus and unites the species with Lathobium. But I think with Latreille that it must be a distinct genus.

PÆDERUS. Fabr.

1. P. *discopunctatus*, Yellowish; abdomen black at tip.

Inhab. U. S.

Body elongated, dull honey-yellow, punctured: *head* with close set, discoidal punctures; subquadrate, obtuse before: *antennæ* and *palpi* paler than the head: *thorax* with discoidal punctures, which are close set and like those of the head with a central point; oval, rather smaller than the head; edges a little darker: *elytra* a little paler than the head and thorax, with dense, transversely somewhat confluent punctures: *abdomen* dark honey-yellow, black at tip: *feet* colour of the elytra.

Length less than three-twentieths of an inch.

Resembles P. *binotatus*, Say, but may be distinguished at first sight by the more obtuse anterior termination of the head and by the absence of the elytral spots, which mark that species.

2. P. *cinctus*, Black; tips of the elytra obscure rufous.
Inhab. U. S.

Body elongated, black with a slight tinge of piceous, and with discoidal punctures: *head* obtuse before: *antennæ* and *palpi* honey-yellow: *thorax* somewhat smaller than the head, a little obovate, obscurely rufous behind: *elytra* obscure rufous at tip: *tergum*, posterior margins of the segments dull rufous: *feet* pale honey-yellow.

Length nearly three-twentieths of an inch.

Resembles the preceding in form and in the obtuse anterior termination of the head.

RUGILUS, Leach.

R. *dentatus*, Black; feet pale; elytra dull rufous at tip.
Inhab. U. S.

Body piceous black: *head* longitudinally wrinkled: *antennæ*, *palpi* piceous: *labrum* large, bidentate in the middle, piceous, rounded each side: *thorax* smaller than the head, longitudinally wrinkled, convex, with a longitudinal, glabrous line: *elytra* with numerous, minute, hairy punctures; a subsutural impressed line; posterior margin dull rufous, or yellowish: *feet* pale yellowish.

Length over three-twentieths of an inch.

Var. a. Posterior margin nearly black towards the suture; glabrous thoracic line almost obsolete.

Much smaller than R. *orbiculatus*, Payk. and the wrinkles of the head and thorax are larger and more obvious.

STENUS, Latr.

1. S. *geniculatus*, Black: antennæ and feet whitish.
Inhab. U. S.

Body black, with a very slight cinereous tinge; deeply punctured: *head* with a wide, but not very deep indentation each side of the middle; profoundly punctured: *antennæ* whitish: anterior part of the head with short whitish hairs: *thorax* punctured like the head: *elytra* also with profound punctures: *tergum* a deeper black than the elytra; segments with large punctures at base and small ones towards the tip: *feet* yellowish-white; posterior knees blackish.

Length less than one-fifth of an inch.

This has been supposed to be the same as the *fuscipes*, Grav. but it is much larger, with pale feet, &c.

2. S. *colon*, Black; elytra with a rufous dot; feet pale beneath.

Inhab. Indiana.

Body black, with large, dense, not very profound punctures: *elytra* with the punctures towards the suture longitudinally confluent; a sublunate or triangular, dull rufous spot rather behind the middle of each elytrum: *tergum* with the punctures not smaller at the posterior margins of the segments: *feet* dirty yellowish: *thighs* blackish above.

Length over three-twentieths of an inch.

Much like S. *biguttatus*, Linn. but is much smaller, and the spot of the elytra is placed rather more outward and backward, and is more triangular and emarginate before.

3. S. *stygicus*, Greyish black, immaculate.

Inhab. Missouri.

Body black, with a slight tint of gray; punctures dense, with short, prostrate hairs: *head* obtusely indented each side between the eyes: *thorax* broadest a little before the middle: *elytra*, region of the scutel indented: *tergum* of a more unmixed black than the anterior part of the body: *feet* immaculate.

Length nearly three-twentieths of an inch.

Resembles *bupthalmus*, Schr. but may be distinguished by the more obvious indentations of the head.

4. S. *femoratus*, Grayish-black; thighs rufous.

Inhab. Pennsylvania.

Body black with a slight tinge of gray; punctures dense, with short, prostrate hairs: head obtusely indented each side between the eyes: *thorax* broadest rather before the middle, contracted behind; a slight appearance of indentation behind the middle: *elytra*, region of the scutel a little indented: *tergum* of a more unmixed black than the other part of the body: *anterior* thighs rufous, black at the knee; *posterior thighs* obscure rufous.

Length less than three-twentieths of an inch.

5. S. *quadripunctatus*, Black, punctured; thorax hexagonal, inequal.

Inhab. Missouri.

Body deep black, immaculate, profoundly and densely punctured; *mouth* testaceous; *palpi* black; *thorax* hexagonal, the lateral edge projecting into an angle in the middle, disk with four dilated, indented spots, placed in quincunx, with a slightly elevated line between them, one or two obsolete, indented spots near the lateral angle; *abdomen*, *pectus* and *postpectus* impunctured, the former with short hairs; *feet* piceous.

Length more than one-tenth of an inch.

Found at Engineer Cantonment. It has a somewhat different aspect from the preceding species. The eyes are not quite so large, and the three last joints of the antennæ are not so remarkably larger than the others.

OXYPORUS, Fabr.

O. *stygicus*, Black; tarsi rufous.

Inhab. Indiana.

Body black, polished: *antennæ* 2-5 joints rufous: *labrum* rufous: *palpi* honey-yellow: *thorax* with the lateral deflected margin indented: *elytra* entirely black; a subsutural stria, and an abbreviated one on the middle, near which is another obsolete one, and many rather large distant punctures; exterior margin impunctured: *feet* blackish piceous: *tarsi* pale rufous.

Length three-tenths of an inch.

The thorax is somewhat longer than that of *cinctus*, Grav. and the punctures of the elytra are more numerous.

OXYTELUS, Grav.

1. O. *sculptus*, Blackish; five lined; elytra rufous; feet pale.

Inhab. Pennsylvania.

Body piceous-black, punctured: *head* indented, with numerous, small punctures above; *mouth* piceous: *antennæ* fuscous, piceous at base: *thorax* with five grooves, of which the exterior ones are dilated and not deeply impressed; densely punctured; anterior angles not acute: *elytra* dull rufous, with small hairy punctures; a subsutu-

ral impressed line and another from the humerus not reaching the tip: *tergum* black with a piceous tinge: *feet* yellowish-white; *tibiæ and tarsi* a little darker.

Length over three-twentieths of an inch.

Gravenhorst considered this insect as specifically identical with his *piceus*, but in his remarks on that species he states that "huic Oxytelo alius affinis est, quam D. Prof. Knoch O. sculptus nuncupauit. Differt thorace lateribus subrotundatis, basin versus paulo angustiore, coleoptris breviore et paulo angustiore, fusco seu rufo; coleoptris quadratis, rufescentibus seu piceo-rufo." These differences of character, indicate a difference of species.—It is the Aleocharasculpta of Melsheimer's catalogue.

2. O. *rugulosus*, Black; logitudinally wrinkled; elytra obscure piceous.

Inhab. Mexico.

Body black, rather short, with numerous punctures, somewhat confluent into longitudinal wrinkles: *head* with three grooves, rather slightly impressed, the lateral ones dilated: *antennæ* brown, dull honey-yellow at base: *palpi* dull honey-yellow: *thorax* with three grooves, of which the middle one is wider before and the lateral ones wider behind; each side a little concave, the edge slightly reflected; anterior angles acute; lateral edge arquated; rounded behind: *elytra* transverse quadrate, blackish-piceous: *tergum* with dense, minute punctures: *feet* honey-yellow.

Length less than one-tenth of an inch.

This does not altogether agree with the var. a. of the *carinatus* of Gravenhorst and to which he has given the name of insignitus. The present species is proportionally much shorter than the *carinatus*. It is not more than half the length of that species. It is more than probable that the insignitus is also a distinct species.

I obtained three specimens of the rugulosus in Mexico.

3. O. *cordatus*, Black: elytra whitish, with a common brown spot.

Inhab. Virginia.

Body black, with numerous, small punctures: *mandibles* piceous: *antennæ* pale, towards the tip brownish: *thorax*

angles almost rounded: *elytra* yellowish white, with a common fuliginous disk: *feet* yellowish-white; *tibiæ* and *tarsi* darker.

Length three-twentieths of an inch.

This occured extremely numerous, in October, under the surface of the sand in flat places on the sea beach, over which the high tides flow. When the water subsides their labours become visible. They proceed forwards a little beneath the surface in a very irregular line, casting up the sand so as to resemble a miniature mole tunnel.

On the wet or partially dry plain, their tunnels, though very small, are yet very striking to the eye, in consequence of their great abundance, and being drier and whiter than the general surface. They appear to be in search of the various minute crustaceous animals, that take refuge in the sand on the recession of the waters.

4. O. *emarginatus*, Black; elytra whitish with a fuliginous suture.

Inhab. Indiana.

Body black, punctured: *head* with numerous, but not crouded, punctures; two longitudinal indentations between the antennæ: *antennæ*, *mandibles* and *palpi* honey-yellow: *thorax* with a piceous tinge, rounded behind; with rather sparse, well defined punctures, and an obvious, impressed, dorsal line: *elytra* with separate punctures and a much dilated, common, fuliginous vitta; sutural tip very obtusely rounded: *feet* honey-yellow: *thighs* and *coxæ* whitish.

Length less than one-tenth of an inch.

The obtusely rounded sutural tip of the elytra, gives this part, in repose, a profoundly emarginated appearance.

GENUS MOLOSOMA, Say.

Labrum entire; palpi filiform, terminal joint of the maxillaries much longer than the second, slightly attenuated to the tip; antennæ before the eyes, inserted under the margin, gradually thicker at tip, four last joints larger; body cylindric; thorax truncate at base; abdomen

with the penultimate segment longest: tibiæ spinous, a little arquated.

M. *latipes*, Grav. (Monog. Coleopt. Micr. p, 198.)

In the present state of the science the latipes, can no longer remain in the genus Oxytelus, as a species of which Gravenhorst described it. That author was, however, perfectly sensible of its distinguishing characters and had he written twenty years later, I should not now have to construct this new genus. The following are his remarks adjoined to his copious description, to which I must refer the reader;

"Cum hoc insectum palpis instructum sit filiformibus, antennis extrorsum crassioribus, thorace immarginato basi truncato, Tachinis adnumerandum foret, si solos characteres, artificiales, (Coleopt. Micropt. p. 134) datos, respiceremus. Habitu autem toto et, exceptis ultimis palporum articulus, partibus etiam singulis cum Oxytelis huius familiæ plane congruit. Certo systematis naturalis nullam haberemus rationem, cum hoc micropteron Tachinis adiungeremus. Oxytelus autem, sicut huc usque determinati erant, ob characteres per systema artificiale constitutos, haud adsociari potest. Eodem ergo iure, quo Astrapæi genus olium a Staphylinus disungebatur, quibus attamen simillimum est, hoc etiam insectum genus novum, ab Oxytelis separatum, conderet, nisi regula systematis naturalis, i. e. character totus externus seu habitus totus, dissuaderet."

ANTHOPHAGUS, Grav.

A. *verticalis*, Body reddish-brown; elytra and margin of the tergum yellowish.

Inhab. Pennsylvania.

Body chestnut, punctured, a little hairy: *head* darker than the thorax, punctures sparse; disk of the vertex impressed; between the antennæ une*n*ual: *untennæ* and *mouth* paler than the head: *thorax* convex, rounded each side, contracted at base, with a conspicuous impressed line, terminating behind in a dilated puncture: *elytra* reddish-yellow, punctured, at tip obscure: *tergum* with a with a dorsal impressed line; posterior or rather lateral

triangular yellow spot, on the lateral margin of each segment: *thighs* testaceous; *tibiæ* & *tarsi* somewhat darker.

Length under one fifth of an inch.

Allied to A. *brunneus*, Nob. but the segments of the tergum are not margined around by dusky; on each is a dusky triangle, much dilated on the posterior margin so as nearly to reach the lateral edge.

OMALIUM, Grav.

1, O. *marginatus*, Piceous, punctured; antennæ & feet dull rufous.

Inhab. Upper Missouri.

Body oblong oval, piceous, punctured; *head*, punctures sparse, obsolete at tip; with an indentation each side between the antennæ & a longitudinal impressed line each side at base: *antennæ* rufous at base, red-brown-obscure at tip with cinereous hair: *palpi* rufous: *thorax* transverse subquadrate, punctures not crouded; posterior edge obscurely piceous; *elytra* longitudinally quadrate, covering more than half of the tergum, exterior margin piceous towards the humerus; exterior hind angles rounded, sutural ones acute; almost to be traced into striæ: *feet* piceous, paler towards the tip; *tergum* obscurely rufous on the margin, & on the posterior margins of the segments.

Length one tenth of an inch.

I obtained this insect when with Major Long's expedition to the Rocky mountains; I think it occurred at Engineer cantonment on the Missouri.

2. O. *rotundicolle*, Piceous black; thorax rounded behind, emarginate before.

Inhab. Pennsylvania.

Body with rather large, numerous & profound punctures; *antennæ* piceous, brown, the three basal joints, *labrum* & *palpi* honey yellow: *thorax* transverse oval, deeply emarginate before, equally punctured; posterior angles rounded; edges piceous: *elytra* equally punctured, long: terminal edge piceous: *tergum* piceous, rather paler on

NOTE.

Since the preceding pages were printed I have received the second edition of the Regne Animale (Amer. Ed.)

the posterior margins of the segments: *feet* dark honey yellow: *venter* somewhat piceous.

Length less than one fifth of an inch.

Taken on the wing at twilight, in October.

TACHINUS, Grav.

1. T. *atricaudatus*, Nob.

Is very closely allied to atricapillus, & cinctus, Grav.

2. T. *obsoletus*, Black; thorax, curve on the elytra, segment margins & feet yellowish.

Inhab. Virginia.

Body black: *antennæ* fuscous; four basal joints yellowish; tip of the last joint dirty fulvous; *mouth* honey yellow: *thorax* honey-yellow: *elytra*, in some lights with an appearance of obsolete striæ; subsutural impressed line obvious; a honey-yellow base, suture & terminal margin; *abdomen* with the segments piceous on their posterior margins: feet pale yellowish.

Length over one fourth of an inch.

I obtained this species in October, at Chinquotege Island.

3. T. *trimaculatus*, yellowish; head & three elytral spots blackish: tergum rufous.

Inhab. Pennsylvania.

Body yellow, tinged with honey-yellow: *head* obscure piceous; *antennæ* fuscous: four basal joints pale yellow; *mouth* yellow: *mandibles* piceous at tip: *thorax* immaculate: *scutel* piceous; *elytra* with a few remote punctures on the basal half, & towards the tip obsolete impressed striæ, a subsutural impressed line, near which is a series of distant larger punctures; region of the scutel with a dilated blackish triangle, extending to the middle of the length of the suture & thence by a narrow & paler sutural line to the tip; exterior margin or epipleura black, with a spot near its tip extending inwards, half way to the suture but not reaching the tip of the elytra: *tergum* dull sangineous; near the tip with an obsolete, blackish band; at tip with a yellowish tinge.

Length over three twentieths of an inch.

4. T. *cincticollis*, Black; posterior thoracic margin, line of the elytra & feet yellowish.

Inhab. Indiana.

Body black: *mouth* yellowish; *palpi* pale yellow: *antennæ* fouscous, three basal joints yellowish; fourth joint piceous; *thorax* posterior margin, & lateral margin dilating towards the posterior angles, honey-yellow: *scutel* piceous: *elytra* with an appearance of striæ at tip; a sutural impressed striæ, near which is a series of distant punctures, & another near the the middle & a submarginal one; pale yellowish, a dilate oval blued black spot extends from before the middle to the tip, does not attain to the suture & is confluent with a blackish marginal line, which does not reach the humerus: *tergum*, segments on their posterior margins, obscure piceous: *feet* pale yellow.

Length less than one fifth of an inch.

Distinguished from the others of this country, by the differently coloured thoracic margin.

5. T. *humidus*, Black; elytra & posterior margins of the abdominal segments, rufous.

Inhab. Indiana.

Body black: *antennæ* brownish, base & mouth honey yellow: *thorax* piceous on the posterior edge; *elytra* rufous or honey yellow, an impressed subsutural line, near which is a series of punctures, surface with sparse punctures almost to be traced into two or three series; sutural margin very slightly dusky; *tergum* blackish, with piceous posterior margins of the segments: tip somewhat fulvous: *feet* honey-yellow.

Length one tenth of inch.

Allied to the preceding, but is a much smaller species, & the elytra are immaculate.

TACHYPORUS, Grav.

1. T. *fumipennis*, Black; margin of the thorax & base of the elytra yellowish.

Inhab. Pennsylvania.

Body minutely punctured: *head* black: *antennæ* filiform, brown; four basal joints honey yellow: *palpi* filiform, yellowish: *thorax* black, margined around with honey-yellow: *scutel* black: *elytra* fuliginous, a wide part of the base & narrow tip dull honey-yellow: *tergum* blackish.

the segments piceous on the hind margins ; *beneath* black-piceous : *feet* honey yellow.

Length over three twentieths of an inch.

2. T. *moestus*, Piceous, sericeous: thorax & elytra margined with dull yellowish obscure.

Inhab. U. States.

Body, blackish piceous, somewhat sericeous : *mouth & antennæ* dull yellowish ; the latter pale brownish towards the middle : *palpi*, penultimate joint thick ; last joint much shorter & acicular : *thorax* dilated, convex, lateral & basal margins dull yellowish : *elytra*, basal & exterior margins dull yellowish : *abdomen* somewhat hairy at tip: *beneath* honey yellow : *feet* not or hardly spiny.

Length less than three twentieths of an inch.

The paler margins of the thorax & elytra are sometimes almost obsolete.

3. T. *jocosus*, Black ; thorax, elytra, feet & mouth yellowish.

Inhab. Indiana.

Head black-piceous, polished, convex, impunctured : *antennae* honey-yellow (six ultimate joints wanting in the specimen) *palpi* honey-yellow, terminal joint acicular : *thorax* polished, impunctured, yellowish ; anterior & posterior margins blackish ; scutel blackish : *elytra* yellowish, with very fine, prostrate hairs ; region of the scutel blackish : *tergum*, posterior margins of the segments yellowish ; longer than the elytra, (in the preserved state ;) *feet* pale yellow.

Length one tenth ot an inch.

4. T. *ventriculus*, Black ; thorax each side & elytral margin piceous.

Inhab. Pennsylvania.

Body black, with a slight piceous tinge, polished ; *antennæ* dull yellowish, dusky towards the tip : *mouth* dull yellowish : *palpi* filiform : *thorax* piceous on the lateral margin, gradually shading to the general blackish colour : *elytra* on the lateral margin & at tip piceous ; common edge of the tip not indented at the suture : *tergum* (in the preserved state,) much shorter than the elytra ; at tip of the

segments dull piceous : *feet* honey-yellow ; *tibiæ* not remarkably spiny.

Length one twelfth of an inch.

The abdomen contracts very much in desiceation.

This can hardly be the *crassus* Grav. as his description does not indicate it.

5. T. *opicus*, Blackish ; feet, base of the thorax & of the elytra obscure reddish brown.

Inhab. Missouri.

Body deep black-brown, somewhat sericeous : *head* black : *antennæ* at base & tip, pale reddish brown : *palpi* pale reddish brown : *thorax* convex ; a narrow, obscure, red brown posterior margin : *elytra* with a broad red-brown basal margin : *feet* red brown : *tibiæ* not remarkably spinous ; *tergum* with paler margins to the segments, shorter than the elytra, hairy at tip.

Length over one tenth of an inch.

This species is not highly polished, but is distinctly sericeous.

6. T. *acaudus*, Abbreviated ; honey yellowish ; thorax paler each side.

Inhab. Indiana.

Body honey-yellow, polished : *head* black-piceous ; *antennæ* fuscous, four basal joints obscure yellowish : *palpi* yellowish, last joint acicular : *thorax* honey yellowish, more dusky on the disk & at base ; and paler, somewhat translucent on the lateral margin : *elytra* yellow with a rufous tinge, a little hairy, dusky on the region of the scutel ; tip of the suture a little rounded so as to produce an acute, but small, common emargination : *tergum* less than half the length of the elytra, blackish brassy, somewhat hairy : *feet* yellow, pale : *tibiæ* with obvious, but not very prominent spines.

Length nearly one twelfth of an inch.

This is very broad in proportion to its length, in consequence of the great contraction of the abdomen in drying. It resembles *jocosus*, N. but is wider in proportion to its length, without taking into consideration the extraordinary brevity of the abdomen.

7. T. *faber*, Thorax & elytra yellowish; near the scutel depressed; last joint of the palpi very short.

Inhab. Indiana.

Body somewhat depressed: *head* black-piceous, polished: *antennæ* yellowish towards the base: *palpi*, penultimate joint rather dilated; ultimate joint very short, conic, hardly one fourth as long as the preceding: *thorax* honey yellow glabrous; *scutel* small, dusky: *elytra* paler than the thorax, slightly hairy; suture & base near the scutel a little dusky; region of the scutel somewhat indented: *tergum* wider & more depressed than in most species, paler towards the tip: *beneath* reddish brown: *feet* yellowish; *tibiæ* a little spinous.

Length about one twelfth of an inch.

The abdomen is more depressed than usual in this genus, & the terminal joint of the maxillary palpi is much shorter than in our other species.

Much reform seems requisite in this & the preceding genera.

8. T. *fimbriatus*; Grav. Varies in being more or less tinged with ferruginous. The head & thorax are sometimes entirely dull ferruginous. It is the *boleti* of Melsh. Catal. but it was afterwards first described by Gravenhorst under the name which I have of course adopted.

ALEOCHARA, Grav.

1. A. *obscuricollis*, Black; elytra ferruginous; tarsi piceous.

Inhab. Mexico.

Body black: *head* opake: *labrum* piceous: *thorax* orbicular, truncated before for the reception of the head, opake: *elytra* ferruginous, length hardly exceeding the breadth: *scutel* black, opake: *abdomen* obviously hairy, polished, lateral edge somewhat elevated: *tarsi* piceous.

Length less than three tenths of an inch.

2. A. *bimaculata*, Grav.

Aspecies very closely allied, or perhaps the same as the *bimaculata*, Grav. is an inhabitant also of Mexico.

3. A. *lustrica*, Blackish; thorax each side, elytra & feet dull rufous.

Inhab. Pennsylvania.

Body piceous-black, obviously punctured: *head* black, with numerous punctures, sparse in front & more dense behind; before the antennæ triangularly carinate, dull piceous: *antennæ* dark reddish brown, three basal joints honey-yellow: *mouth* dull honey yellow: *thorax* with very numerous punctures, rather larger towards the base & almost to be traced into transverse arquated lines; lateral margins piceous: *elytra* dull yellowish-rufous, with dense punctures: *abdomen* piceous at tip: *feet* honey yellow.

Length under one fourth of an inch.

5. A. *fasciata*, Yellow; head, band of the elytra & spot on the tergum, black.

Inhab. Pennsylvania.

Body yellow, with a slight rufous tinge: *head* black piceous, with rather large punctures each side towards the eyes: *eyes* large, prominent: *mouth* dull yellowish: antennæ at base pale yellow: *thorax* sparsely & unequally punctured, with four somewhat larger remote punctures on the disk: *elytra*, punctures small, not deeply impressed; posterior half blackish: *tergum* with a black dot near the tip: *feet* whitish.

Length about one twelfth of an inch.

This is the A. *fasciata* of Melsh. Catal.

5. A. *indentata*, Yellowish; head, thoracic disk, elytral spot & middle of the tergum, black.

Inhab. Pennsylvania.

Head not obviously punctured: *eyes* not remarkably large or prominent: *antennæ* reddish brown, pale at base: *mouth* honey yellow: *thorax* dull yellowish, dusky in the middle; a longitudinal impressed line, & an indentation on the middle of the base: *elytra* with small, numerous punctures; yellowish with the sutural edge & a triangular spot, extending from before the middle to the posterior outer angle, but not reaching the suture: *tergum* reddish yellow the two middle segments blackish: *beneath* yellowish; *postpectus* & *middle of the venter* black: *feet* whitish.

Length one fifteenth of an inch.

Var. A. Thorax with the dusky disk obsolete.

Resembles the *dichroa* Grav. in having the indentation on the middle of the base, but it it differs in many respects & obviously in colouring.

6. A. 4-*punctata*, Thorax rufous, with four punctures placed transversely.

Inhab. Missouri & Indiana.

Head piceous black, with one puncture on the inner orbit, & three or four behind the eye: *antennæ*, reddish brown, three basal joints honey yellow: *palpi* piceous: *thorax* honey yellow with four distant punctures before the middle, placed in a transverse line, the lateral ones less distinct: *elytra* dull honey yellow, with minute punctures, having prostrate hairs; *tergum* piceous, paler towards the tip: *beneath* dark piceous: *feet* yellowish.

Length over one tenth of an inch.

The four punctures of the thorax is an obvious character.

7. A. *propera*, Blackish; thorax depressed on the posterior middle.

Inhab. Indiana.

Body with very numerous, small punctures, furnishing pale yellowish hairs: *antennæ* black fuscous, three or four basal joints piceous: *mouth* piceous: *thorax* black-piceous, conspicuously hairy; on the middle of the base indented: *elytra* piceous-brown, obviously hairy, a little depressed on the basal margin & in the region of the scutel: *tergum* black: *feet* pale piceous.

Length over or about one tenth of an inch.

The depression, almost aro quite amounting to an indentation at base of the thorax is sometimes geminate.

8. A. *semicarinata*, Blackish; thorax with a carina on the basal half.

Inhab. Missouri.

Body black with a piceous tinge: *thorax* with an elevated line, or two parallel impressed striæ, from the middle to the base: *elytra* with a slightly impressed sutural groove on the basal half: *abdomen* black: *feet* pale piceous.

Length less than one tenth of an inch.

Resembles the preceding, but may be distinguished by the double thoracic groove, forming an inclined carina.

9. A. *Simplicicollis*, Blackish; antennae, feet, inner tip of the elytra and posterior margins of the segments of the tergum reddish-brown.

Inhab. Missouri.

Body with short prostrate hairs: *head* black: *antennae* reddish-brown, transverse joints somewhat darker: *elytra* on the sutaral margin, particularly towards the tip, obscure reddish-brown; common emargination at tip very obvious: *tergum* with, the posterior margins of the segments dull reddish brown, *feet* redish-brown or honey yellow.

Length about one tenth of an inch.

Distinguished from the two preceding species by the simplicity of the thorax and the margined segments of the tergum.

10. A. *falsifica*, Black; with converging hairs; elytra and feet yellowish.

Inhad. Indiana.

Body black, with rather long, prostrate hairs: *head* with the hairs converging to the middle line and directed forward: *antennae* blackish, basal joints obscure piceous: *palpi* dull yellowish: *thorax* with the hairs converging to the middle line and directed forwards: *elytra* dull yellowish, darker on the base, suture and outer margin, the hairs somewhat arranged so as to resemble striae: *feet* honey yellow

Length about one tenth of an inch.

11. A. *verna*, Black. distinctly punctured; inner tip of the elytra dull yellowish.

Inhab. Missouri.

Body with scattered hairs: *head* polished, with sparse irregnlarly arranged, rather large punctures: *antennae* or the basal joints hardly tinged with piceous: *thorax* polished, with numerous, rather large, unequal, and irregularly scattered punctures; midle line destitute of punctures: *feet* black-piceous.

Lenght about one tenth of a inch
the more conspicuous and irregular puncturing will distinguish this species from the above described.

12 A. exigua Black, punctured: antenna and feet hardly tinged with piceous.
inhab. Indiana.
Body black, a little polished, with short hair; punctures numerous, somewhat regular: antennae at base, & palpi very slightly tinged with piceous: elytra a little indented at the scutel, at tip the common emargination obtuse not profound: feet Black = piceous.
Length one twentieth of an inch.

13. A. minima, Black; elytra and feet dull yelowish
inhab. indiana.
Body black, with numerous prostrate hairs: antennae towards the base with a very slight tinge of piceous. elytra dull yellowish: tergum dirty yellowish at tip: feet whitish yellow, dull.
Length nearly one tenth of an inch.
var. a. thorax nearly the colour of the elytra

14 A. Bilobata, Dark reddish brown; thorax subcordate. Calaniculate; feet pale.
inhab. missouri and indiana
Body very dark reddish brown, with numerous regular punctures: antennae two bassal joints paler: mouth beneath, excepting the terminal joints of the maxillary palpi, pale testaceous: thorax rounded before & narrower behind, very deeply canaliculate, groove abruptly abbreviated on the basal margin: Elytra at tipe and sides with smaller punctures than the thorax: suture indented: feet pale testaceous: tergum segments with dilated punctures at base.
Length less than three twentieths of an inch.
the thoracic canal is less dilated, but at least as profound as that of the canaliculata, grav. the thorax is more contracted behind and the head is more prominent and distinctly separate from the thorax by a short neck.

the genus aleochara, as is obvious to entomologists needs reformation. the present species and some others of gravenhorst's first divisions may be separated from it under the following name and characters. genus aleodorus.

Head prominent, with a distinct neck, not inserted into the thorax; antennae inserted into the anterior internal orbit of the eye; three basal joints longest, maxillary palpi long; terminal joint, acicular; thorax longitudinal, rounded on the sides, or without lateral edge; feet simple.

Buprestidæ F.

F. B. virginie Turton's Linn p. 441. Drury's ins. vol. 1 p. 66. pl. 30, fig 3.

this species very closely resembles B. mariana, L. and notwithstanding the magnitude of Drury's figure, it is somewhat smaller than the latter species, the posterior part of the thorax is a little narrower and the curvature of its lateral edge is somewhat different. it inhabits the eastern and middle states.

3. B. liberta germ. this differs more in color from the virginiensis, than the latter species does from the mariana; but it corresponds with virginiensis in the form of the thorax. I am still inclined to consider it a variety of that species, which germar does not refer to in his description of his liberta.

3. B. livida F (and melsh catal.)

this is the corrosa, deg. MSS. Herbst, olivier did not observe the anal points, which are sometimes obscured by the hair.

4 B. divaricata nob. that this insect is closely allied to acuminata F., there can be no doubt and Dejean. (in letter) considers it the same, but on reference to the description of that species by gyllenhall (insecta svecica*) I find the followings characters "thorax ante scutellum puncto duo

(note) I am indebted to professor wiedeman for the two very useful works on "Coleoptera microptra" by gravenhorst.
they contain detailed descriptions of many north amerrican species of the limean genus Staphylinus, which now constitute a large family.

impressa: anus emarginatus". In the present species is only a single indentation at the base of the thoracic groo ve and immediately anterior to the scutel, and the anus is tridentated, the middle tooth being more slender and acute. A variety in my collection is destitute of the punctur ed striae of the elytra.

4. B. *obscura*, F. (and Melsh. Catal.)
Herbst says the side of the thorax is rectilinear, not arquated. This would agree better with lurida, F.; my specimens of obscura are rectilinear only from before the middle to the base.

5. B. *dentipes*, Germar. This is the characteristica of Melsh.
Catalogue. But as no mere catalogue can establish a name Germar's must be of course, retained, because it is the first name recognizable by a description.

6. B. *hybernata*, F. From the specimen in my collection, I am led to believe that the hybernata, F. is but a variety of the frontalis, Oliver. and that both have serrate elytra; but I have not at present the means of referring to Olivier's work. My specimen is reddish-purple; thorax immaculate; elytra serrate, with but five green spots and the anterior thighs are armed with a prominent tooth.

7. B. *Sexguttata*, Nob. (Journ. Acad. Nat. Sc.) This name being preoccupied by Herbst for an American species, we change it *Sexsignata*.

8. B. gibbicolis, Nob. (Journ. A. N. S.) This name is preoccupied by Illiger for an European species, it must therefore be changed to

9. B. *pulchella*, Herbst. The volvulus, F. is prabably the same species; but which of the two names has the pri-

* For this very accurately descriptive work, I am indebted to the politeness of the author.

ority I cannot now ascertain, not having the date of Herbst's volume. There is some confusion amongst the species of the small group to which this belongs, in consequence of the short descriptions of Fabricius. Hrebst's description of this species cannot well be mistaken. I have found it in Pensylvania, Florida and Arkansaw. It is the ornata, of Dejean's catalogue and Germar (in a letter) considers it a new species under the name of *olydonia*.

10. B. *ornata*, F. About the size of the preceding, though perhaps a littte more robust, of a much darker color and may also be distinguished from it by the thorax having the dorsal line deeply indented more especially on the posterior margin and being obtusely angulated behind the middle of the lateral edge. Dejean supposed it a new species and gave it (in Mss.) the name of multiguttata, but I think there is no doubt that it is the Fabrician species.

11. B. *tubulus*, F. This species is described as having but five yellow punctures on the elytra, placed 2.2.1, the latter being the largest. But it varies considerably in this respect sometimes having 8 or 9 spots, and again other specimens occur with not more than are indicated by Fabricious, if we conssder the posterior larger one as being composed of two confluent ones. The rest of the description agrees precisely. and even the noted size corresponds with our insect as Fabricius says" Statura omnino B. voluuli, at duplo minor". It may indeed, be at once distinguised from pulchella by its much inferior size, very different color, and the greater regularity of its elytral spots; but the lateral edge of its thorax has a similar curvature. It is the smallest of our species of the group distinguished by the want of scutel &c. and approaches the ornata by its coluring and by the somewat similar arrangement of the elytral spots, but differs in the regular curvature of its lateral thoracic edge. It is the volvulus of Dejean's Catalogue. Germar believed it new and gave it the name of xanthocyma; it is the culta of Weber and Dr. Harris has described it under the name of geranii.

12. B. acornis. Rusty black: antennae short; scutel green; — beneath cupreous
inhab. indiana

Body with dense, rather large, confluent punctures: head — a little tinged with cupreous, particularly towards the tip: tip — of the clypeus not narrowed, not emarginate, but with a slight concave curvature: labrum hardly prominent, not visible when — viewed from above: antennae very short not reaching the — vertex, the three basal joints together about as long as ~~half~~ — the others combined. thorax in breadth at least twice the — length, with transverse confluent punctures: scutel bright — green. elytra with transversely confluent punctures: serrate — from near the humerus. surface obsoletely undulated: beneath cupreous: anterior thighs with a prominent acute spine.
Length seven twentieths of an inch
a small and distinct species

13. B. impedita, elytra binish green grooved and punctured.
inhab. Pensylvania

head coffluently punctured, green with a cupreous reflection — antennae steel-blue, at base green: labrum green, ciliate at — tip: thorax cupreous with green confluent punctures; on some parts of the disk the punctures are sparse: scutel ovale regularly — concave green(x) gradually shaded into a blue vitta along the — middle; suture and outer margin cupreous; tip somewhat — truncated: beneath green cupreous.

Length three fifths of an inch.

The specimen was taken near Philadelphia it is evidently — related to salisburiens is as described by weber to decora F — & splendens F of china. But weber's description states the — former to have striated elytra without elevated lines. the — splendens has only three elevated lines on the elytra — & the decorus is larger, with the tip of the elytra —

(x) Elytra densely punctured, with five dilated grooves and four elevated lines the latter sparsely punctured: green

two-toothed. Neither can it be the striata oliv. as the elytra are not slightly bidendate, nor are their two inner elevated lines abbreviated. a variety found by my brother B. Say in new jersey is much tinted with copper and is smaller, but the sculpture and form are the same.

I may add as closely allied to the impedita and to the Salisburiensis, web. in point of coloring a specimen which I found in new jersey many years since and which I then described under the name of ultramarina; but the description was mislaid and never published & the specimen is now deprived of its head and thorax the following is a description of what remains of it. Scutel orbicular disk indented: Elytra blue on the disc: submargin and subsuture green passing into golden towards the margin and suture, which are brilliant coppery or red golden; basal margin green golden, surface with seven or eight striae of dilated, profound punctures, the interstitial lines with each a single series of smaller punctures no elevated lines: tip truncated, with a slight projection at the inner angle: Beneath green-golden with a slight coppery tinge tibiae coppery.

Length of the elytra two-fifths of an inch.

it is more brilliant than either the impedita or Salisburiensis. from the former it is distinguished by being destitute of elevated lines on the elytra and from both by its regular series of large profound punctures.

14. B. viridicornis nob. this has been mistaken by an european entomologiste for the agilas ruficollis F. but it is very different in form, which is much more like that of a true Buprestis, and the color is also different, though that of the head and thorax probably deceived him, being coppery in each though much more obscure in our insect. I have taken a variety in this state, differing greatly in color so much so, that it might lead to error unless actually compared.

The colour is bright green, thorax on the disk tinged with

coppery, with a common grenn triangle eztending from the humerous to beyond the middle; beneath, the green color, is less brilliant. Another variety has the cupreous color of the thorax confined to the lateral margin, the remainder being of the color of the elytra.

I may add to the specific description that the head has an orbicular indentation between the eyes and a slightly indented line on the vertex; the scutel is altogether destitute of a transverse elevated line, it is convex and widely triangular: the elytra are minutely serrate at tip.

This species has characters in common with Buprestis & Agrilus, and it may perhaps belong to the latter.

AGRILUS, Megerle.

1. A. rufficollis, F. We may add to the Fabrician characters that the head is profoundty indentented on the vertex, the indented line is continued down the front; the elytra are scabrous and at tip, as well as that of the abdomen serrate.

Var. A. Thorax obscure green.
Var. B. Thorax color of the elytra.

The great indentation of the virtex distinguishes this species from others of this country. Herbst's figure only tends to mislead, if indead it can be intended for this insect at all. It is too robust, and the thorax is not represented as indented and the elytra are punctured in striae, with large punctures.

3. A. geminatus, Nob. A numerous species, the colour of the head and thorax often resembling those of the preceding species, but the acute, arquated, elevated line at the posterior angles, is similar to that of the linearis, F. of Austria, which it very much resembles.

3. A. politus, Nob. Much like arquatas, but a little more robust and of a brilliant color. Like. the other species its elytra are denticulated at tip. Having examined numerous specimens I find that it is not of a larger size than geminatus.

Rest, Conchifera:

Aspidon [illegible] spec. [illegible]

Trachys 2 spec.

Melonia 2 spec.

Aphanostoma 1 spec.

Eulima 1 spec.

Vola 1½ [illegible] species

See "Complete Writings", Vol. II
p. 525, Note.

Was only published in: Trans. Amer. Philos. Soc. Philadelphia
1836 T. IV p. 150 163 190
according to Hope. In the Index Lit. Conch. (Hanley)
there is a mention of p. 1-81. in the
Ist volume

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